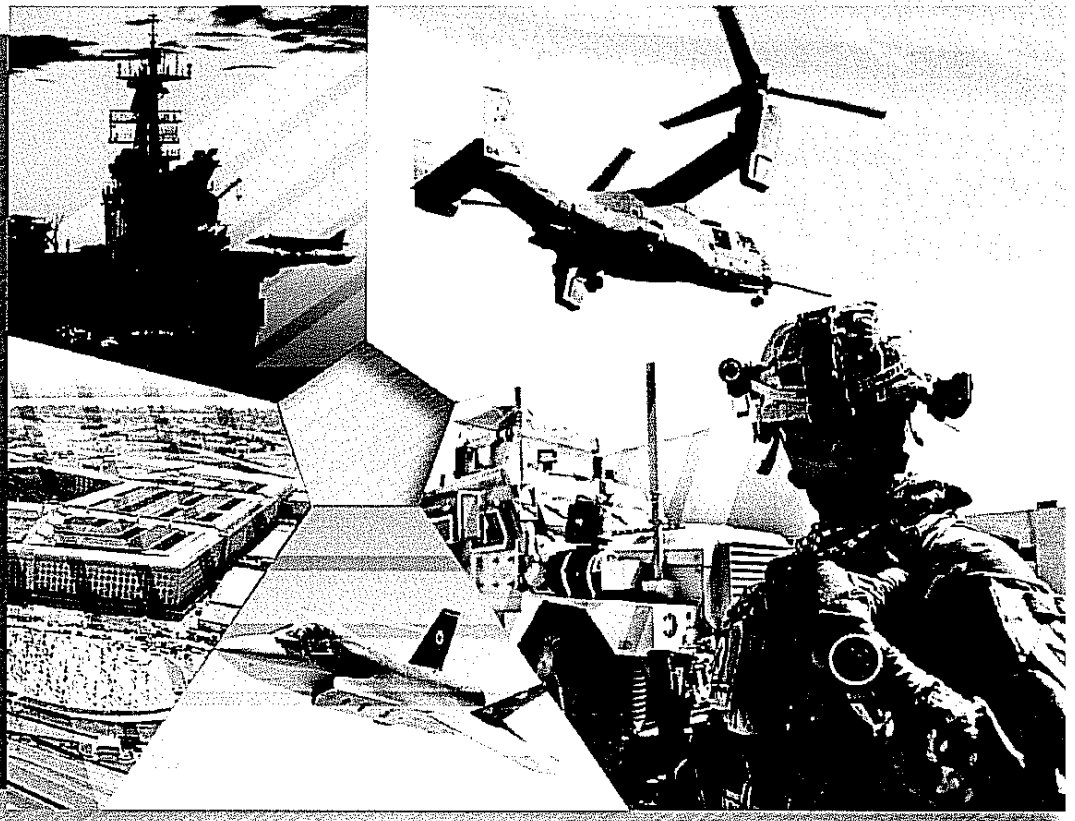


# PROGRAM ACQUISITION COSTS BY WEAPON SYSTEM



UNITED STATES  
DEPARTMENT OF DEFENSE



February 2012

OFFICE OF THE UNDER SECRETARY OF DEFENSE  
(COMPTROLLER) / CHIEF FINANCIAL OFFICER

# Major Weapon Systems

## OVERVIEW

The combined capabilities and performance of U.S. weapons systems are unmatched throughout the world, ensuring that our military forces have the advantage over any adversary. The DoD (FY) 2013 acquisition funding request totals \$178.8 billion, of which \$109.1 billion is for Procurement, and \$69.7 billion is for Research, Development, Test and Evaluation (RDT&E) programs. The request includes both Base (\$169.7 billion) and Overseas Contingency Operations (OCO) (\$9.1 billion) funding. Of this amount, \$72.3 billion is for programs that have been designated as Major Defense Acquisition Programs (MDAP). This book focus on the key MDAP programs. To simplify the display of the various weapon systems, this book is organized by mission area categories.

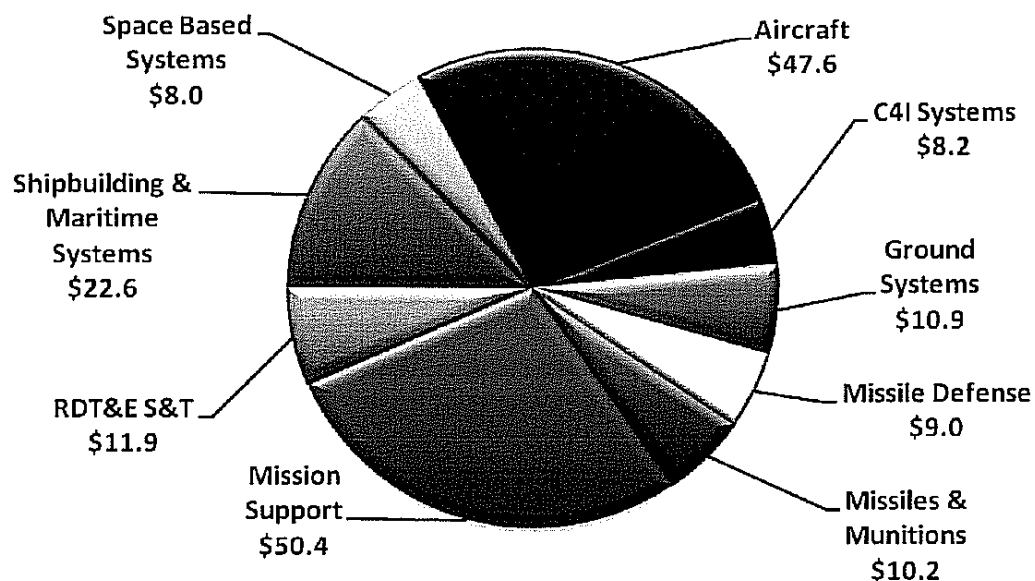
## Funding Categories

- Aircraft
- Command, Control, Communications, and Computer (C4) Systems
- Ground Programs
- Missile Defense
- Munitions and Missiles
- Shipbuilding and Maritime Systems
- Space Based and Related Systems
- Mission Support
- Science and Technology

## FY 2013 Modernization – Base and OCO: \$178.8 Billion

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(\$ in billions)



Source: FY 2013 PRCP – Investment Categorization

Numbers may not add due to rounding

## **FY 2013 Program Acquisition Costs by Weapon System**

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Preparation of this study/report cost the  
Department of Defense a total of  
approximately \$37,933.00 for the 2012  
Fiscal Year.

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				2013				
Major Weapon Systems Summary (\$ in Millions)			FY 2011	FY 2012	Base	OCO	Total Request	Page
Aircraft – Joint Service								
MQ-1/MQ-9	Predator and Reaper		1,759.4	2,074.3	1,910.0	-	1,910.0	1-2
RQ-4	Global Hawk		1,610.6	1,456.4	1,250.9	-	1,250.9	1-3
RQ-7/RQ-11	Shadow and Raven		687.1	294.5	220.4	7.6	228.0	1-4
C-130J	Hercules		1,302.2	1,429.1	835.1	-	835.1	1-5
F-35	Joint Strike Fighter		9,682.3	9,246.0	9,171.2	-	9,171.2	1-6
JPATS T-6A	Texan II		26.1	264.2	286.3	-	286.3	1-7
V-22	Osprey		2,902.8	2,764.1	1,939.3	-	1,939.3	1-8
Aircraft – US Army (USA)								
AH-64	Apache Longbow Block 3		581.7	758.3	1,109.2	71.0	1,180.2	1-9
CH-47	Chinook		1,430.3	1,409.2	1,231.0	231.3	1,462.3	1-10
LUH	Light Utility Helicopter		303.5	250.4	272.0	-	272.0	1-11
UH-60	Black Hawk		1,808.8	1,706.6	1,305.5	-	1,305.5	1-12
Aircraft – US Air Force (USAF)								
HH-60M	Pave Hawk		521.3	155.1	60.6	-	60.6	1-13
F-22	Raptor		1,197.8	916.4	808.4	-	808.4	1-14
KC-46A	Tanker		538.9	877.1	1,815.6	-	1,815.6	1-15
Aircraft – US Navy (USN)/US Marine Corps (USMC)								
E-2/D	Advanced Hawkeye		1,316.0	1,205.9	1,159.1	-	1,159.1	1-16
F/A-18E/F	Super Hornet		2,342.0	2,451.6	2,181.8	-	2,181.8	1-17
EA-18G	Growler		1,029.4	1,039.8	1,074.6	-	1,074.6	1-18
H-1	Huey/Super Cobra		804.6	875.7	821.7	29.8	851.5	1-19
MH-60R	Multi-Mission Helicopter		1,075.5	1,002.7	849.7	-	849.7	1-20
MH-60S	Fleet Combat Support Helicopter		571.1	505.3	483.8	-	483.8	1-21
P-8A	Poseidon		2,908.7	2,934.7	3,258.2	-	3,258.2	1-22
C-5	Galaxy		1,004.5	1,164.9	1,279.9	-	1,279.9	1-23
C4 Systems – Joint Service								
JTRS	Joint Tactical Radio System		821.1	1,244.1	1,053.5	-	1,053.5	2-2
C4 Systems – USA								
WIN-T	Warfighter Information Network – Tactical		692.7	1,063.6	1,225.5	-	1,225.5	2-3
Ground Programs – Joint Service								
JTLV	Joint Light Tactical Vehicle		49.3	134.1	116.8	-	116.8	3-2
Ground Programs – USA								
FHTV	Family Of Heavy Tactical Vehicles		749.3	650.4	56.0	2.1	58.1	3-3
FMTV	Family Of Medium Tactical Vehicles		1,092.1	438.2	349.1	28.3	377.4	3-4
M1 Upgrade	Abrams Tank		294.4	453.1	74.4	-	74.4	3-5
Stryker	Stryker Family of Armored Vehicles		1,586.3	771.9	332.3	-	332.3	3-6

		2013					
<b>Major Weapon Systems Summary</b>							
(\$ in Millions)		FY 2011	FY 2012	Base	OCO	Total Request	Page
<b>Missile Defense – Joint Service</b>							
BMD	Ballistic Missile Defense	10,459.8	10,430.7	9,720.8	-	<b>9,720.8</b>	4-2
AEGIS	AEGIS Ballistic Missile Defense	1,814.0	1,554.3	1,382.0	-	<b>1,382.0</b>	4-3
THAAD	Terminal High Altitude Area Defense	1,004.5	999.2	777.7	-	<b>777.7</b>	4-4
Patriot/PAC-3	Patriot, Army	646.3	711.8	763.4	-	<b>763.4</b>	4-5
Patriot/MEADS	Patriot Medium Extended Air Defense System	450.6	389.6	400.9	-	<b>400.9</b>	4-6
PAC-3/MSE Missile	PAC-3/MSE Missile	121.5	163.9	81.9	-	<b>81.9</b>	4-7
GMD	Ground-Based Midcourse Defense	1,245.5	1,159.5	903.2	-	<b>903.2</b>	4-8
AN/TPY-2	Ballistic Missile Defense Radars	389.3	602.3	574.4	-	<b>574.4</b>	4-9
<b>Munitions and Missiles – Joint Service</b>							
AMRAAM	Advanced Medium Range Air-Air Missile	555.0	388.7	423.2	-	<b>423.2</b>	5-2
AIM-9X	Air Intercept Missile - 9X	122.7	150.3	200.2	-	<b>200.2</b>	5-3
Chem-Demil	Chemical Demilitarization	1,592.0	1,629.7	1,452.8	-	<b>1,452.8</b>	5-4
JASSM	Joint Air-to-Surface Standoff Missile	187.5	242.0	248.4	-	<b>248.4</b>	5-5
JDAM	Joint Direct Attack Munition	346.4	127.2	101.9	53.9	<b>155.8</b>	5-6
JSOW	Joint Standoff Weapon	141.7	139.4	133.3	-	<b>133.3</b>	5-7
SDB	Small Diameter Bomb	234.9	182.3	216.1	-	<b>216.1</b>	5-8
<b>Munitions and Missiles – USA</b>							
Javelin	Javelin Advanced Tank Weapon	163.0	170.7	86.1	-	<b>86.1</b>	5-9
GMLRS	Guided Multiple Launch Rocket System (GMLRS)	283.5	399.8	361.7	20.5	<b>382.2</b>	5-10
<b>Munitions and Missiles – USN</b>							
ESSM	Evolved Seasparrow Missile	45.3	48.5	58.2	-	<b>58.2</b>	5-11
RAM	Rolling Airframe Missile	99.6	66.2	66.8	-	<b>66.8</b>	5-12
Standard	Standard Family of Missiles	340.1	403.6	463.4	-	<b>463.4</b>	5-13
Tomahawk	Tactical Tomahawk Cruise Missile	607.1	306.4	320.3	-	<b>320.3</b>	5-14
Trident II	Trident II Ballistic Missile	1,328.5	1,583.5	1,512.6	-	<b>1,512.6</b>	5-15
<b>Shipbuilding and Maritime Systems - USN</b>							
JHSV	Joint High Speed Vessel	390.1	376.4	191.1	-	<b>191.1</b>	6-2
CVN 21	Carrier Replacement	3,080.0	1,072.4	966.7	-	<b>966.7</b>	6-3
DDG 51	AEGIS Destroyer	2,900.3	2,081.4	3,514.9	-	<b>3,514.9</b>	6-4
LCS	Littoral Combat Ship	1,474.2	2,111.2	2,245.6	-	<b>2,245.6</b>	6-5

		2013					
<b>Major Weapon Systems Summary</b>							
(\$ in Millions)		<b>FY 2011</b>	<b>FY 2012</b>	<b>Base</b>	<b>OCO</b>	<b>Total Request</b>	<b>Page</b>
SSN 774	VIRGINA Class Submarine	5,260.2	4,794.9	4,257.7	-	<b>4,257.7</b>	6-6
CVN RCOH	CVN Refueling Complex Overhaul	405.7	515.6	1,613.3	-	<b>1,613.3</b>	6-7
<b>Space Based and Related Systems – USN</b>							
MUOS	Mobile User Objective System	894.5	482.1	167.4	-	<b>167.4</b>	7-2
<b>Space Based and Related Systems – USAF</b>							
AEHF	Advanced Extremely High Frequency	641.9	948.9	786.4	-	<b>786.4</b>	7-3
EELV	Evolved Expendable Launch Vehicle	1,198.3	1,716.2	1,687.9	-	<b>1,687.9</b>	7-4
GPS	Global Positioning System	889.0	1,464.9	1,263.7	-	<b>1,263.7</b>	7-5
SBIRS	Space Based Infrared System	1,487.4	996.1	950.0	-	<b>950.0</b>	7-6
WGS	Wideband Global SATCOM System	619.5	792.9	36.8	-	<b>36.8</b>	7-7



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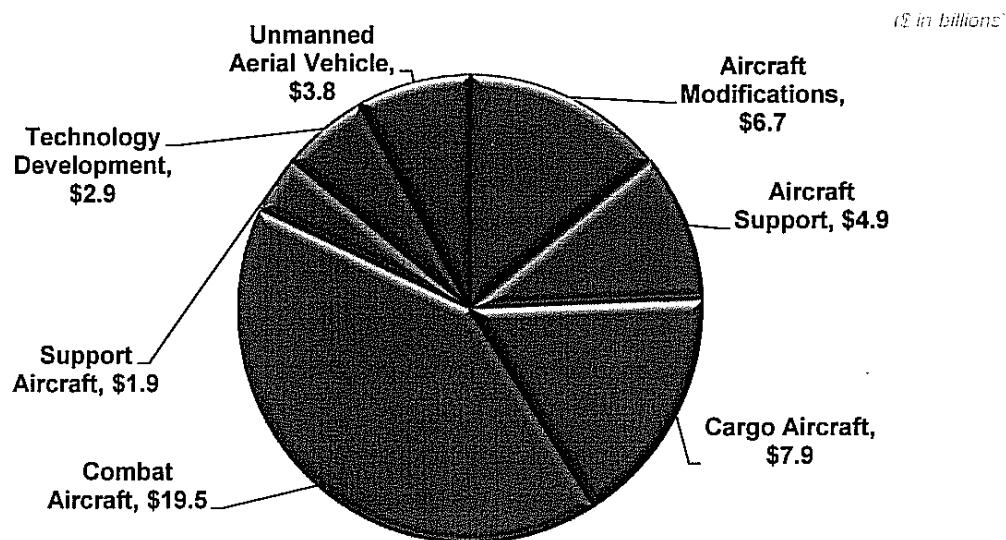
## FY 2013 Program Acquisition Costs by Weapon System

### Aircraft

Aviation forces — including fighter/attack, bomber, mobility (cargo/tanker) and specialized support aircraft — provide a versatile striking force capable of rapid deployment worldwide. These forces can quickly gain and sustain air dominance over regional aggressors, permitting rapid air attacks on enemy targets while providing security to exploit the air for logistics, command and control, intelligence, and other functions. Fighter/attack aircraft operate from both land bases and aircraft carriers to combat enemy fighters and attack ground and ship targets. Bombers provide an intercontinental capability to rapidly strike surface targets. The specialized aircraft supporting conventional operations perform functions such as surveillance, airborne warning and control, air battle management, suppression of enemy air defenses, reconnaissance, and combat search and rescue. In addition to these forces, the U.S. military operates a variety of air mobility forces including cargo, aerial-refueling aircraft, helicopters, and support aircraft.

Aircraft funding decreased from \$54.2 billion in the FY 2012 President's Budget to \$47.6 billion in the FY 2013 President's Budget, reflecting the President's new defense strategy.

### FY 2013 Aircraft – Base and OCO: \$47.6 Billion



Source: FY 2013 PRCP – Investment Categorization

Numbers may not add due to rounding

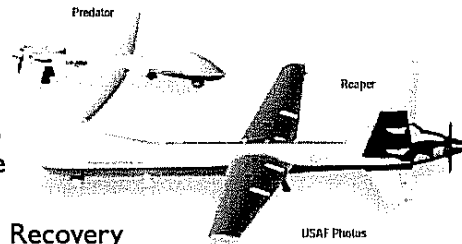


## FY 2013 Program Acquisition Costs by Weapon System

### MQ-1 Predator/MQ-9 Reaper



The Predator and Reaper Unmanned Aerial Systems (UAS) are comprised of an aircraft segment consisting of aircraft configured with an array of sensors to include day/night Full Motion Video (FMV), Signals Intelligence (SIGINT), and Synthetic Aperture Radar (SAR) sensor payloads, avionics, and data links; a ground control segment consisting of a Launch and Recovery Element (LRE), and a Mission Control Element (MCE) with embedded Line-of-Sight (LOS) and Beyond-Line-of-Sight (BLOS) communications equipment; a support element; and trained personnel.



**Mission:** A single-engine, remotely piloted armed reconnaissance aircraft designed to operate over-the-horizon at medium altitude for long endurance. The primary mission is reconnaissance with an embedded strike capability against critical, perishable targets. The Army MQ-1C Gray Eagle also has the unique mission of communications relay.

**FY 2013 Program:** Continues development, transformation and fielding of Predator and Reaper aircraft and ground stations to support 65 healthy Combat Air Patrols (CAP)/orbits by FY 2017.

**Prime Contractor:** General Atomics–Aeronautical Systems Inc., San Diego, CA

### MQ-1 Predator/MQ-9 Reaper

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RDT&amp;E</b>										
Predator USAF	42.8	-	11.6	-	9.1	-	-	-	9.1	-
Reaper USAF	136.7	-	126.7	-	148.0	-	-	-	148.0	-
Gray Eagle USA	119.2	-	121.8	-	74.6	-	-	-	74.6	-
SOCOM	3.7	-	5.0	-	4.4	-	-	-	4.4	-
<b>Subtotal</b>	<b>302.4</b>	<b>-</b>	<b>265.1</b>	<b>-</b>	<b>236.1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>236.1</b>	<b>-</b>
<b>Procurement</b>										
Predator USAF	20.1	-	161.2	-	30.9	-	-	-	30.9	-
Reaper USAF	853.6	48	944.2	48	885.4	24	-	-	885.4	24
Gray Eagle USA	554.1	39	697.8	43	749.6	19	-	-	749.6	19
SOCOM	29.2	-	6.0	-	8.0	-	-	-	8.0	-
<b>Subtotal</b>	<b>1,457.0</b>	<b>87</b>	<b>1,809.2</b>	<b>91</b>	<b>1,673.9</b>	<b>43</b>	<b>-</b>	<b>-</b>	<b>1,673.9</b>	<b>43</b>
<b>Total</b>	<b>1,759.4</b>	<b>87</b>	<b>2,074.3</b>	<b>91</b>	<b>1,910.0</b>	<b>43</b>	<b>-</b>	<b>-</b>	<b>1,910.0</b>	<b>43</b>

Includes base funding Congress moved to OCO.

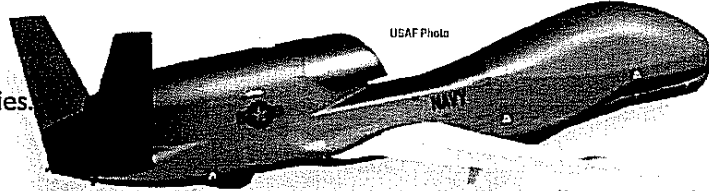
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## FY 2013 Program Acquisition Costs by Weapon System

### RQ-4 Global Hawk

**DOD - JOINT**

The RQ-4/MQ-4C unmanned aircraft supports both Navy, Air Force and NATO AGS capabilities. The USAF RQ-4 Block 20 includes a communications-relay payload,



the Block 30 includes a multi-intelligence suite for imagery and signals intelligence collection, and the Block 40 carries the Multi-Platform Radar Technology Insertion Program for imaging synthetic-aperture radar (SAR) and moving target detection. The USN MQ-4C Broad Area Maritime Surveillance (BAMS) UAS is a tactical asset including payloads for maritime SAR and Inverse SAR, Electro-optical/Infra-red (EO/IR)/Full Motion Video, Electronic Support Measures (ESM), Automatic Identification System (AIS), a basic communications relay capability and Link-16. Each variant features >24 hour endurance and autonomous flight capability. Remote operators control/monitor the aircraft and handle mission planning duties.

**Mission:** The Air Force RQ-4 performs high-altitude, near-real-time, high-resolution Intelligence, Surveillance, and Reconnaissance (ISR) collection while the Navy MQ-4C provides persistent maritime ISR to Joint, Combatant Commander (COCOM) and Navy numbered Fleet commanders from five orbits worldwide.

**FY 2013 Program:** Procures three USAF NATO Alliance Ground Surveillance (AGS) aircraft, payloads, integrated logistics support (to include initial spares, support equipment, technical data, etc.), other related support requirements (training devices, etc.). Also supports continued Navy System Development and Demonstration (SDD) with three aircraft.

**Prime Contractor:** Northrop Grumman Corporation, Rancho Bernardo, CA and Bethpage, NY

### RQ-4 Global Hawk

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RDT&amp;E</b>										
RQ-4, USAF	218.9	-	340.6	-	236.3	-	-	-	236.3	-
RQ-4, NATO	88.9	-	82.9	-	210.1	3	-	-	210.1	3
MQ-4, USN	525.6	-	548.3	-	657.5	3	-	-	657.5	3
<b>Subtotal</b>	<b>833.4</b>	<b>-</b>	<b>971.8</b>	<b>-</b>	<b>1,103.9</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>1,103.9</b>	<b>6</b>
<b>Procurement</b>										
RQ-4, USAF	777.2	4	484.6	3	95.9	-	-	-	95.9	-
MQ-4, USN	-	-	-	-	51.1	-	-	-	51.1	-
<b>Subtotal</b>	<b>777.2</b>	<b>4</b>	<b>484.6</b>	<b>3</b>	<b>147.0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>147.0</b>	<b>-</b>
<b>Total</b>	<b>1,610.6</b>	<b>4</b>	<b>1,456.4</b>	<b>3</b>	<b>1,250.9</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>1,250.9</b>	<b>6</b>

Numbers may not add due to rounding

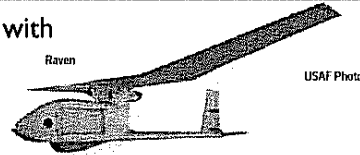
# FY 2013 Program Acquisition Costs by Weapon System

## RQ-7 Shadow/RQ-11 Raven

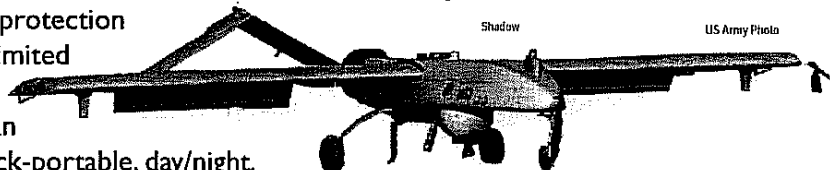
**DOD - JOINT**

The RQ-7 and RQ-11 unmanned aircraft are deployable with ground forces that provide tactical Intelligence, Surveillance, and Reconnaissance (ISR).

**Mission:** The Shadow provides the tactical maneuver commander near-real-time reconnaissance, surveillance, target acquisition, and force protection during day/night and limited adverse weather conditions. Raven is an "over the hill" rucksack-portable, day/night, limited adverse weather, remotely-operated, multi-sensor system in support of combat battalions and below as well as selected combat support units.



USAF Photo



US Army Photo

**FY 2013 Program:** Procures multiple variations of quantities for the small unmanned Raven-class aircraft, system hardware, and contractor logistics support.

**Prime Contractors:** Shadow: AAI Corporation Hunt Valley, MD  
Raven: AeroVironment, Monrovia, CA

## RQ-7 Shadow/RQ-11 Raven

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RDT&amp;E</b>										
Shadow USA	7.6	-	31.9	-	31.2	-	-	-	31.2	-
Shadow USMC	25.2	-	0.9	-	0.9	-	7.6	-	8.5	-
Raven USA	1.5	-	1.9	-	4.0	-	-	-	4.0	-
Raven USMC	0.5	-	1.0	-	0.5	-	-	-	0.5	-
SOCOM	-	-	4.5	-	-	-	-	-	-	-
<b>Subtotal</b>	<b>34.8</b>	<b>-</b>	<b>40.2</b>	<b>-</b>	<b>36.6</b>	<b>-</b>	<b>7.6</b>	<b>-</b>	<b>44.2</b>	<b>-</b>
<b>Procurement</b>										
Shadow USA	549.0	-	165.1	-	104.3	-	-	-	104.3	-
Shadow USMC	26.0	-	-	-	49.3	-	-	-	49.3	-
Raven USA	37.5	206	86.1	900	25.8	234	-	-	25.8	234
Raven USMC	28.3	4	2.1	-	2.3	-	-	-	2.3	-
Raven USAF	9.4	-	-	-	-	-	-	-	-	-
SOCOM	2.1	-	1.0	-	2.1	-	-	-	2.1	-
<b>Subtotal</b>	<b>652.3</b>	<b>210</b>	<b>254.3</b>	<b>900</b>	<b>183.8</b>	<b>234</b>	<b>-</b>	<b>-</b>	<b>183.8</b>	<b>234</b>
<b>Total</b>	<b>687.1</b>	<b>210</b>	<b>294.5</b>	<b>900</b>	<b>220.4</b>	<b>234</b>	<b>7.6</b>	<b>-</b>	<b>228.0</b>	<b>234</b>

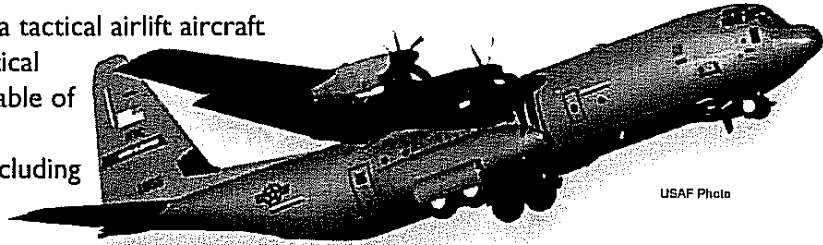
Numbers may not add due to rounding

# FY 2013 Program Acquisition Costs by Weapon System

## C-130J Hercules

**DOD - JOINT**

The C-130J Hercules is a tactical airlift aircraft modernizing the U.S. tactical airlift capability. It is capable of performing a number of tactical airlift missions including deployment and redeployment of troops



and/or supplies within/between command areas in a theater of operation, aeromedical evacuation, air logistic support and augmentation of strategic airlift forces.

**Mission:** The mission of the C-130J is the immediate and responsive air movement and delivery of combat troops and supplies directly into objective areas primarily through airlanding, extraction, and airdrop and the air logistic support of all theater forces.

**FY 2013 Program:** Continues the procurement of C-130J aircraft, by funding one HC-130J, four MC-130s and two AC-130s for the Air Force in FY 2013 and advance procurement to support Marine Corps aircraft.

**Prime Contractor:** Lockheed Martin Corporation, Marietta, GA

## C-130J Hercules

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RDT&amp;E</b>										
HC/MC-130	15.0		22.1		19.0				19.0	-
C-130J	25.9		39.5		30.7				30.7	-
Subtotal	41.0	-	61.6	-	49.7	-	-	-	49.7	-
<b>Procurement</b>										
<b>USAF</b>										
C-130J	462.5	8	186.4	1	68.4				68.4	-
HC/MC/AC-130	798.8	9	1,093.8	10	691.0	7			691.0	7
Subtotal	1,261.3	17	1,280.2	11	759.4	7	-	-	759.4	7
<b>Procurement</b>										
<b>USN</b>										
KC-130J			87	1	26.0				26.0	
Subtotal	-	-	87	1	26.0		-	-	26.0	-
<b>Spares</b>										
	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>1,302.2</b>	<b>17</b>	<b>1,429.1</b>	<b>12</b>	<b>835.1</b>	<b>7</b>	<b>-</b>	<b>-</b>	<b>835.1</b>	<b>7</b>

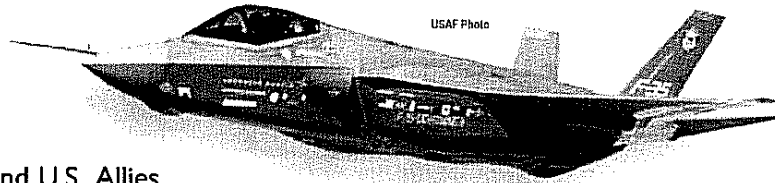
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## FY 2013 Program Acquisition Costs by Weapon System

### F-35 Joint Strike Fighter

**DOD - JOINT**

The F-35 Joint Strike Fighter (JSF) is the next-generation strike fighter for the Navy, Marine Corps, Air Force, and U.S. Allies.



The JSF consists of three variants: Conventional Take-Off and Landing (CTOL), Short Take-Off and Vertical Landing (STOVL), and Carrier (CV).

**Mission:** The JSF will complement the Navy F/A-18E/F and the Air Force F-22 aircraft, and replace the Marine Corps AV-8B, F/A-18C/D and Air Force A-10 and F-16 aircraft. The JSF will provide all-weather, precision, stealthy, air-to-air and ground strike capability, including direct attack on the most lethal surface-to-air missiles and air defenses.

**FY 2013 Program:** Restructures the Joint Strike Fighter program to reduce concurrency. The budget procures 29 aircraft: 4 CV for the Navy, 6 STOVL for the Marine Corps, and 19 CTOL for the Air Force in FY 2013.

**Prime Contractors:** Lockheed Martin Corporation, Fort Worth, TX  
Pratt & Whitney, Hartford, CT

### F-35 Joint Strike Fighter

	FY 2011*		FY 2012		FY 2013*					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RDT&amp;E</b>										
USN	1,256.3		1,310.3		1,481.1				1,481.1	-
USAF	931.6		1,397.9		1,218.4				1,218.4	-
<b>Subtotal</b>	<b>2,187.9</b>	<b>-</b>	<b>2,708.2</b>	<b>-</b>	<b>2,699.5</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,699.5</b>	<b>-</b>
<b>Procurement</b>										
USN	2,691.1	10	2,816.3	13	2,583.7	10			2,583.7	10
USAF	4,302.2	25	3,518.6	18	3,565.7	19			3,565.7	19
<b>Subtotal</b>	<b>6,993.3</b>	<b>35</b>	<b>6,334.9</b>	<b>31</b>	<b>6,149.4</b>	<b>29</b>	<b>-</b>	<b>-</b>	<b>6,149.4</b>	<b>29</b>
<b>Spares</b>	<b>501.1</b>	<b>0</b>	<b>202.9</b>	<b>0</b>	<b>322.3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>322.3</b>	<b>0</b>
<b>Total</b>	<b>9,682.3</b>	<b>35</b>	<b>9,246.0</b>	<b>31</b>	<b>9,171.2</b>	<b>29</b>	<b>-</b>	<b>-</b>	<b>9,171.2</b>	<b>29</b>

\* FY 2011 & FY 2013 for Air Force includes aircraft modification funding.

Numbers may not add due to rounding.

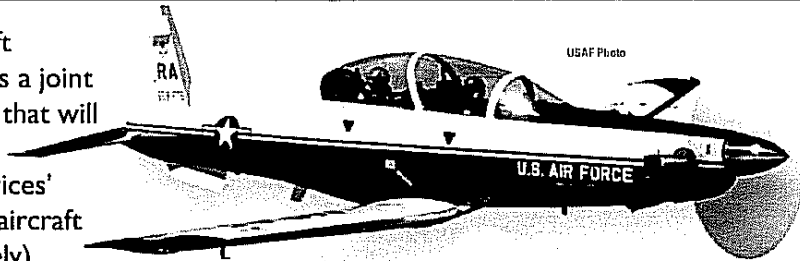
## FY 2013 Program Acquisition Costs by Weapon System

### JPATS T-6B Texan II

**DOD - JOINT**

The Joint Primary Aircraft Training System (JPATS) is a joint Navy/Air Force program that will use the T-6B Texan as a replacement for the Services' fleets of primary trainer aircraft (T-34 and T-37, respectively)

and associated Ground Based Training Systems. The T-6 Texan II is a tandem seat, turboprop aircraft derivative of the Pilatus PC-9 powered by a single Pratt & Whitney PT6A-68 engine.



**Mission:** Supports joint Navy and Air Force specialized undergraduate pilot training.

**FY 2013 Program:** Continues production of JPATS aircraft, supporting procurement of 33 aircraft and associated support for the Navy in FY 2013.

**Prime Contractor:** Hawker Beechcraft, Wichita, KS

JPATS T-6B Texan II										
	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E									-	-
Procurement										
USN	26.1		256.9	36	278.9	33			278.9	33
USAF	-	-	-	-	-	-	-	-	-	-
Subtotal	26.1	-	256.9	36	278.9	33	-	-	278.9	33
Spares		-	7.3	-	7.4	-	-	-	7.4	-
Total	26.1	-	264.2	36	286.3	33	-	-	286.3	33

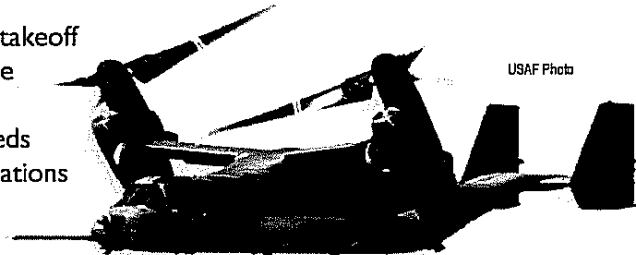
*Numbers may not add due to rounding*

## FY 2013 Program Acquisition Costs by Weapon System

### V-22 Osprey

**DOD - JOINT**

The V-22 Osprey is a tilt-rotor, vertical takeoff and landing aircraft designed to meet the amphibious/vertical assault needs of the Marine Corps, the strike rescue needs of the Navy and long range special operations forces (SOF) missions for US Special Operations Command (USSOCOM).



The aircraft is designed to fly 2,100 miles with one in-flight refueling, giving the services the advantage of a vertical and/or short takeoff and landing (V/STOL) aircraft that could rapidly self-deploy to any location in the world.

**Mission:** The V-22 mission includes airborne assault, vertical lift, combat search and rescue, and special operations.

**FY 2013 Program:** Supports procurement of 17 MV-22 aircraft for the Navy and 4 CV-22 aircraft for Air force-USSOCOM. The procurement objective is 458 aircraft: 408 MV-22 aircraft for the Navy (Navy (50) / Marine Corps (358)), and 50 CV-22 aircraft for Air Force-USSOCOM. The request is based on a follow-on 5-year multiyear procurement contract, for FYs 2013 to 2017.

**Prime Contractor:** Bell Helicopter, Fort Worth, TX  
The Boeing Company, Philadelphia, PA

### V-22 Osprey

	FY 2011*		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RDT&amp;E</b>										
USN	42.7	-	84.5	-	54.4	-			54.4	-
USAF	17.6	-	13.2	-	28.0	-			28.0	-
Subtotal	60.3	-	97.7	-	82.4	-	-	-	82.4	-
<b>Procurement</b>										
USN	2,190.9	30	2,265.9	30	1,457.3	17			1,457.3	17
USAF	474.5	6	359.9	5	309.2	4	-	-	309.2	4
Subtotal	2,665.4	36	2,625.8	35	1,766.5	21	-	-	1,766.5	21
USN	-	-	8.3	-	16.0	-	-	-	16.0	-
USAF	107.9	-	56.8	-	90.4	-	-	-	90.4	-
Spares	107.9	-	65.1	-	106.4	-	-	-	106.4	-
USN Subtotal	2,233.6	30	2,358.7	30	1,527.7	17	-	-	1,527.7	17
USAF Subtotal	600.0	6	429.9	5	427.6	4	-	-	427.6	4
<b>Total</b>	<b>2,833.6</b>	<b>36</b>	<b>2,788.6</b>	<b>35</b>	<b>1,955.3</b>	<b>21</b>	<b>-</b>	<b>-</b>	<b>1,955.3</b>	<b>21</b>

\* FY 2011 includes Base and OCO funding

Numbers may not add due to rounding

## FY 2013 Program Acquisition Costs by Weapon System

### AH-64 Apache Block 3: New Build/ReManufacture

**USA**

The Apache Block 3 program consists of a mast mounted Fire Control Radar (FCR) integrated into an upgraded and enhanced AH-64 airframe. This program also provides for the installation of the Target Acquisition Designation Sight (TADS) and Pilot Night Vision Sensors (PNVS), plus other safety and reliability enhancements.



US Army Photo

**Mission:** The AH-64 provides a fire-and-forget HELLFIRE air-to-ground missile capability, modernized target acquisition and night vision capabilities.

**FY 2013 Program:** The AH-64 Block 3 program is comprised of both remanufactured and new build aircraft. Request supports the remanufacture of 40 aircraft and 10 new build aircraft to the AH-64 D (Longbow) Block 3 configuration. Two of the new build aircraft are funded within OCO to replace combat losses.

**Prime Contractors:** Integration: Northrop Grumman Corporation, Baltimore, MD  
Lockheed Martin Corporation, Oswego, NY  
Apache: The Boeing Company, Mesa, AZ

### AH-64 Apache Block 3: New Build/ReManufacture

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
ReManufacture AB3A										
RDT&E	90.7	-	92.7	-	124.3	-	-	-	124.3	-
Procurement	491.0	16	561.3	19	684.8	40	-	-	684.8	40
Total	581.7	16	654.0	19	809.1	40	-	-	809.1	40
New Build AB3B										
RDT&E	-	-	-	-	-	-	-	-	-	-
Procurement	-	-	104.3	-	300.1	8	71.0	2	371.1	10
Total	-	-	104.3	-	300.1	8	71.0	2.0	371.1	10
Grand Totals	581.7	16	758.3	19	1,109.2	48	71.0	2	1,180.2	50

Numbers may not add due to rounding



## FY 2013 Program Acquisition Costs by Weapon System

### CH-47 Chinook



The CH-47F program procures new and remanufactured/Service Life Extension Program CH-47F helicopters. The aircraft include an upgraded digital cockpit and modifications to the airframe to reduce vibration. The upgraded cockpit includes a digital data bus that permits installation of enhanced communications and navigation equipment for improved situational awareness, mission performance, and survivability. The new aircraft uses more powerful T55-GA-714A engines that improve fuel efficiency and enhance lift performance.



**Mission:** To provide a system designed to transport ground forces, supplies, ammunition, and other battle-critical cargo in support of worldwide combat and contingency operations.

**FY 2013 Program:** Funds the acquisition of 44 aircraft, of which 25 will be new build aircraft and 19 will be remanufactured/Service Life Extension Program aircraft. Six of the new build aircraft are funded within OCO to replace combat losses.

**Prime Contractor:** The Boeing Company, Philadelphia PA

### CH-47F Chinook

	FY 2011*		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RDT&amp;E</b>	10.5	-	48.9	-	71.6	-			71.6	-
<b>Procurement</b>	1,419.8	49	1,360.3	47	1,159.4	38	231.3	6	1,390.7	44
<b>Total</b>	<b>1,430.3</b>	<b>49</b>	<b>1,409.2</b>	<b>47</b>	<b>1,231.0</b>	<b>38</b>	<b>231.3</b>	<b>6</b>	<b>1,462.3</b>	<b>44</b>

\* FY 2011 includes Base and OCO funding

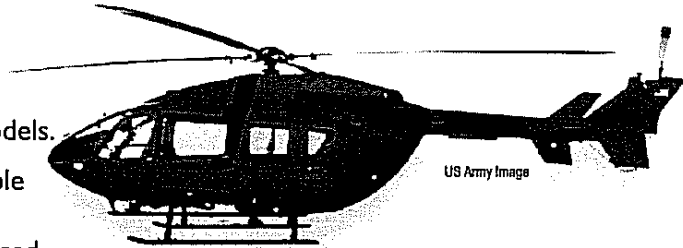
Numbers may not add due to rounding

## FY 2013 Program Acquisition Costs by Weapon System

### LUH Light Utility Helicopter

The Light Utility Helicopter (LUH) will be a utility helicopter replacing the UH-1 and the OH-58 Kiowa Warrior A and C models.

It will provide reliable and sustainable general and administrative support in permissive environments at reduced acquisition and operating costs. There is no RDT&E funding required for this program. The LUH acquisition strategy is based on a competitive procurement of a commercial-off-the-shelf, non-developmental aircraft.



The UH-72A Lakota is a U.S. Army light utility helicopter that entered service in 2006. The Lakota is a militarized version of the Eurocopter EC145 modified to an LUH configuration. In June 2006, the U.S. Army selected it as the winner of its LUH program with a 345 aircraft fleet planned.

**Mission:** The Light Utility Helicopter will provide organic general support at Corps and Division levels. The primary mission for the LUH is to provide aerial transport for logistical and administrative support.

**FY 2013 Program:** Supports the continued production of 34 aircraft.

**Prime Contractor:** EADS North America American Eurocopter, Columbus, MS

### LUH Light Utility Helicopter

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	-	-	-	-	-	-	-	-	-	-
Procurement	303.5	50	250.4	39	272.0	34	-	-	272.0	34
Total	303.5	50	250.4	39	272.0	34	-	-	272.0	34

*Numbers may not add due to rounding*

## FY 2013 Program Acquisition Costs by Weapon System

### UH-60 Black Hawk

USA

The UH-60 BLACKHAWK is a four bladed, twin engine, single-rotor utility helicopter that is designed to carry a crew of four and a combat equipped squad of 11 or an equal cargo load. It is also capable of carrying external loads of up to 6,000 lbs.

The UH-60 comes in many variants, and many different

modifications. The Army variants can be fitted with the stub wings to carry additional fuel tanks or weapons. Variants may have different capabilities and equipment in order to fulfill different roles. The Black Hawk series of aircraft can perform a wide array of missions, including the tactical transport of troops, electronic warfare, and aeromedical evacuation.

**Mission:** The BLACKHAWK provides a highly maneuverable, air transportable, troop carrying helicopter for all intensities of conflict, without regard to geographical location or environmental conditions. It moves troops, equipment and supplies into combat and performs aeromedical evacuation and multiple functions in support of the Army's air mobility doctrine for employment of ground forces.

**FY 2013 Program:** Supports continuation of a 5-year multiyear procurement (MYP) contract for FYs 2012-2016. The program is currently on schedule and within budget. The FY 2013 budget request supports continued production of 59 base funded aircraft. Specific UH-60 variants funded include the Utility UH model and the Medical HH model.

**Prime Contractor:** Sikorsky Aircraft, Stratford, CT

### UH-60 Black Hawk

	FY 2011*		FY 2012*		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	19.9	-	8.0	-	83.3	-	-	-	83.3	-
Procurement	1,788.9	99	1,697.6	72	1,222.2	59	-	-	1,222.2	59
<b>Total</b>	<b>1,808.8</b>	<b>99</b>	<b>1,705.6</b>	<b>72</b>	<b>1,305.5</b>	<b>59</b>	<b>-</b>	<b>-</b>	<b>1,305.5</b>	<b>59</b>

\* FY 2011 & FY 2012 include Base and OCO funding

Numbers may not add due to rounding

## FY 2013 Program Acquisition Costs by Weapon System

### HH-60M Pave Hawk/Combat Rescue Helicopter (CRH)

USAF

The HH-60M Pave Hawk is a search and Rescue version of the Army's UH-60M Blackhawk helicopter. The HH-60M is a four bladed, twin engine, single-rotor helicopter that is designed to carry a crew of four and a combat equipped squad of 11 or an equal cargo load. It is also capable of carrying external loads of up to 6,000 lbs. The HH-60M comes in many variants and many different modifications.



The Air Force variant can be fitted with the stub wings to carry additional fuel tanks or weapons. Variants may have different capabilities and equipment in order to fulfill different roles. The HH-60M will replace the HH-60G.

**Mission:** The HH-60 Pave Hawk is the U.S. Air Force version of the UH-60 Black Hawk of the U.S. Army, modified for aircrew search and rescue in all weather situations. The Pave Hawk series of aircraft can perform a wide array of missions, including the tactical transport of troops, electronic warfare, search and rescue, combat support, and aero medical evacuation.

**FY 2013 Program:** Request funds post production procurement and missionization of prior year acquired HH-60 aircraft to a fielded HH-60G configuration, as part of the continuing HH-60 Operational Loss Replacement (OLR) program. Development funding supports a long term Combat Search and Rescue (CSAR) replacement for the currently fielded HH-60 platform. Specific platform configuration and fielding are dependent upon finalizing Air Force acquisition plans to acquire a long term replacement Combat Rescue Helicopter (CRH) platform through a full and open competition.

**Prime Contractor:** Sikorsky Aircraft, Stratford, CT - HH-60; TBD - CRH

### HH-60M Pave Hawk/Combat Rescue Helicopter (CRH)

	FY 2011*		FY 2012*		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	12.0	-	11.1	-	-	-	-	-	-	-
Procurement	521.3	16	144.0	4	60.6	-	-	-	60.6	-
Spares	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>533.3</b>	<b>16</b>	<b>155.1</b>	<b>4</b>	<b>60.6</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>60.6</b>	<b>-</b>

\* FY 2011 & FY 2012 include Base and OCO funding

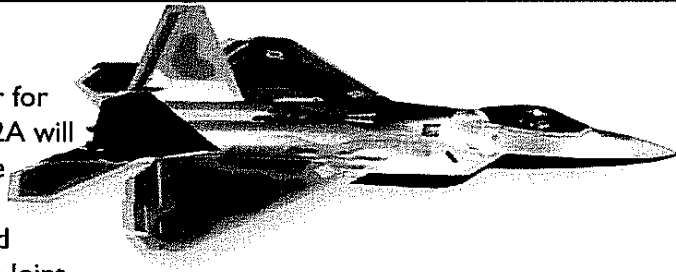
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## FY 2013 Program Acquisition Costs by Weapon System

### F-22 Raptor



The F-22 Raptor program is the next generation air superiority fighter for the first part of the century. The F-22A will penetrate enemy airspace and achieve first-look, first-kill capability against multiple targets. It has unprecedented survivability and lethality, ensuring the Joint Forces have freedom from attack, freedom to maneuver, and freedom to attack.



**Mission:** The F-22 will provide enhanced U.S. air superiority capability against the projected threat and will eventually replace the F-15 aircraft.

**FY 2013 Program:** Continues critical F-22 modernization through incremental capability upgrades and key reliability and maintainability efforts. Continues retrofit of Increment 3.1 into the combat-coded F-22 fleet. Increment 3.1 provides an initial ground attack kill chain capability via inclusion of emitter-based geo-location of threat systems, ground-looking synthetic aperture radar (SAR) modes, electronic attack capability, and initial integration of the Small Diameter Bomb (SDB-I), which expands the F-22's ground attack arsenal from one Joint Direct Attack Munition (JDAM) to four SDB-I's per payload. Continues development of Increment 3.2, providing AIM-120D and AIM-9X integration, radar electronic protection, enhanced speed and accuracy of target geo-location, intraflight data link improvements, Automatic Ground-Collision Avoidance System (AGCAS), and other enhancements to improve system safety and effectiveness.

**Prime Contractors:** Lockheed Martin, Marietta, GA; Fort Worth, TX; and Palmdale, CA;  
Boeing, Seattle, WA;  
Pratt & Whitney, Hartford, CT

F-22 Raptor										
	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	493.5	-	571.3	-	511.8	-	-	-	511.8	-
Procurement	592.5	-	336.2	-	283.9	-	-	-	283.9	-
Spares	111.8	-	8.9	-	12.8	-	-	-	12.8	-
<b>Total</b>	<b>1,197.8</b>	<b>-</b>	<b>916.4</b>	<b>-</b>	<b>808.4</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>808.4</b>	<b>-</b>

*Numbers may not add due to rounding*

## FY 2013 Program Acquisition Costs by Weapon System

### KC-46A Tanker

The KC-46A Aerial Refueling Tanker will replace the aging fleet of KC-135 tankers. The KC-46A Program, the first phase of KC-135 recapitalization, will procure aircraft to replace roughly one-third of the current KC-135 tanker fleet.

**Mission:** The KC-46A will meet the primary air refueling missions of Global Attack, Air Bridge, Theater Support, Deployment, and Special Operations Support. Air refueling forces perform these missions at the strategic, operational, and tactical level across the entire spectrum of military operations. Other missions include emergency air refueling, aero medical evacuation, and combat search and rescue.



**FY 2013 Program:** Continues the development of the next generation aerial refueling tanker.

**Prime Contractor:** The Boeing Company, Seattle, WA

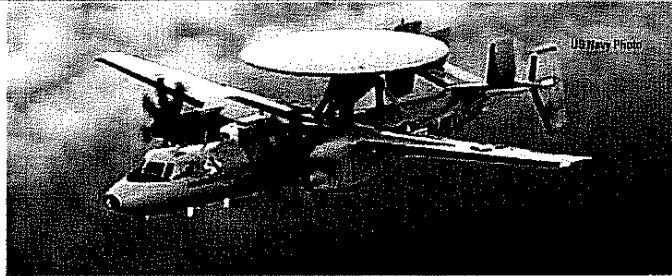
KC-46A Tanker										
	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	538.9	-	877.1	-	1,815.6	-	-	-	1,815.6	-
Procurement	-	-	-	-	-	-	-	-	-	-
Spares	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>538.9</b>	<b>-</b>	<b>877.1</b>	<b>-</b>	<b>1,815.6</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,815.6</b>	<b>-</b>

*Numbers may not add due to rounding*

## FY 2013 Program Acquisition Costs by Weapon System

### E-2D Advanced Hawkeye

The E-2D Advanced Hawkeye (AHE) is an airborne early warning, all weather, twin-engine, carrier-based aircraft designed to extend task force defense perimeters. The Advanced Hawkeye provides improved battle space target detection and situational awareness, especially in the littorals; supports the Theater Air and Missile Defense operations; and improves Operational Availability for the radar system.



**Mission:** The E-2D AHE provides advance warning of approaching enemy surface units and aircraft to vector interceptors or strike aircraft to attack. It provides area surveillance, intercept, strike/air traffic control, radar surveillance, search and rescue assistance, communication relay and automatic tactical data exchange. The E-2D AHE provides a two-generational leap in radar technology, and will provide the long range air and surface picture; theater air and missile defense, and is a key component of Naval Integrated Fire Control-Counter Air (NIFC-CA).

**FY 2013 Program:** Funds five E-2D AHE Low Rate Initial Production (LRIP) aircraft, associated support, and funds advance procurement for five FY 2014 aircraft. Supports follow-on test and evaluation, trainers, non-recurring engineering for MODE 5/S and in-flight refueling.

**Prime Contractors:** Airframe: Northrop Grumman Corporation, Bethpage, NY  
(Engineering) and St. Augustine, FL (Manufacturing)  
Engine: Rolls-Royce Corporation, Indianapolis, IN  
Radar: Lockheed Martin Corporation, Syracuse, NY

### E-2D Advanced Hawkeye

	FY 2011*		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RDT&amp;E</b>	168.2	-	131.0	-	119.1	-	-	-	119.1	-
<b>Procurement</b>	1,105.0	5	1,044.8	5	984.7	5	-	-	984.7	5
<b>Spares</b>	43.0	-	30.0	-	55.4	-	-	-	55.4	-
<b>Total</b>	<b>1,316.0</b>	<b>5</b>	<b>1,205.9</b>	<b>5</b>	<b>1,159.1</b>	<b>5</b>	<b>-</b>	<b>-</b>	<b>1,159.1</b>	<b>5</b>

\* FY 2011 includes Base and OCO funding

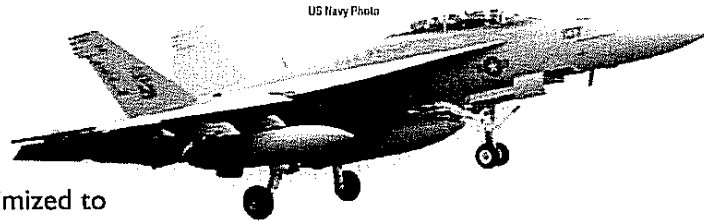
Numbers may not add due to rounding

## FY 2013 Program Acquisition Costs by Weapon System

### F/A-18E/F Super Hornet



The F/A-18E/F Super Hornet is a carrier-based, twin-engine, high-performance, multi-mission, tactical fighter and attack aircraft. With its selected external equipment, the aircraft can be optimized to accomplish both fighter and attack missions.



**Mission:** The F/A-18E/F strike fighter performs the traditional missions of fighter escort, fleet air defense, interdiction, and close air support, while still retaining excellent fighter and self-defense capabilities. The F/A-18E/F aircraft was designed to replace the F-14 fighter aircraft.

**FY 2013 Program:** Supports the multiyear procurement of 26 F/A-18E/F aircraft, associated spares, and provides the advance procurement for 13 aircraft in FY 2014. Continues the research, development, and testing of planned upgrades to the F/A-18E/F aircraft and related systems. Continues to fund the common shared costs between the EA-18G and the F/A-18E/F programs.

**Prime Contractors:** Airframe: The Boeing Company, St. Louis, MO  
Engine: General Electric Aviation, Lynn, MA

F/A-18E/F Super Hornet										
	FY 2011*		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	129.8	-	95.0	-	98.1	-	-	-	98.1	-
Procurement	2,171.8	31	2,303.4	28	2,065.4	26	-	-	2,065.4	26
Spares	40.5	-	53.2	-	18.3	-	-	-	18.3	-
Total	2,342.0	31	2,451.6	28	2,181.8	26	-	-	2,181.8	26

\* FY 2011 includes Base and OCO funding

Numbers may not add due to rounding

No modification funding included

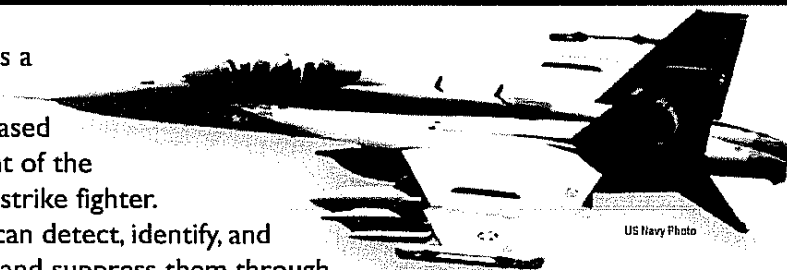


## FY 2013 Program Acquisition Costs by Weapon System

### EA-18G Growler

The EA-18G Growler is a tandem two-seat twin turbojet, carrier-based electronic attack variant of the F/A-18F Super Hornet strike fighter.

The EA-18G Growler can detect, identify, and locate hostile emitters and suppress them through jamming and kinetic effects, and provides a flexible offensive Electronic Warfare (EW) capability to the Joint warfighter across the spectrum of conflict. The EA-18G Growler is the first electronic warfare aircraft produced in more than 35 years and replaces the EA-6B Prowler.



**Mission:** The EA-18G Growler supports naval, joint, and coalition strike aircraft, providing radar and communications jamming and kinetic effects to increase the survivability and lethality of all strike aircraft. The EA-18G Growler can operate autonomously or as a major node in a network centric operation.

**FY 2013 Program:** Supports procurement of 12 EA-18G Growler aircraft and associated spares. This is the fourth year of a multiyear procurement. Also supports the development and testing of EA-18G Growler electronic systems and techniques.

**Prime Contractors:** Airframe: The Boeing Company, St. Louis, MO  
Engine: General Electric Aviation, Lynn, MA

### EA-18G Growler

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	20.2	-	17.1	-	13.0	-	-	-	13.0	-
Procurement	999.1	12	1,022.7	12	1,027.4	12	-	-	1,027.4	12
Spares	10.1	-	-	-	34.2	-	-	-	34.2	-
<b>Total</b>	<b>1,029.4</b>	<b>22</b>	<b>1,039.8</b>	<b>12</b>	<b>1,074.6</b>	<b>12</b>	<b>-</b>	<b>-</b>	<b>1,074.6</b>	<b>12</b>

*Numbers may not add due to rounding*

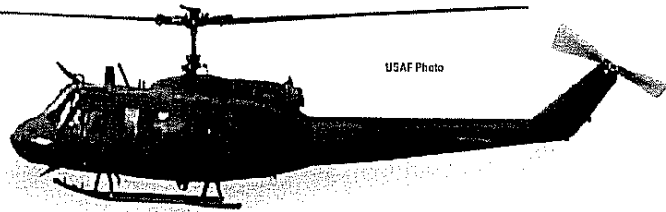
*No modification funding included*

## FY 2013 Program Acquisition Costs by Weapon System

### H-1 Huey/Super Cobra



The H-1 Helicopter Upgrade program converts AH-1W and UH-1N helicopters to the AH-1Z and UH-1Y, respectively.



The upgraded helicopters will have increased maneuverability, speed, and payload capability. The upgrade scope includes a new four-bladed rotor system, new transmissions, a new four-bladed tail rotor and drive system, and upgraded landing gear.

**Mission:** The H-1 Upgrades provide offensive air support, utility support, armed escort, and airborne command and control during naval expeditionary operations or joint and combined operations.

**FY 2013 Program:** Provides for the production of 28 aircraft (base request funds 15 UH-1Y new build aircraft, 4 AH-1Z remanufactured aircraft, and 8 new build AH-1Z aircraft). In addition, the request provides for one additional new build AH-1Z aircraft in OCO to replace a combat loss.

**Prime Contractor:** Bell Helicopter, Fort Worth, TX

### H-1 Huey/Super Cobra Upgrades

	FY 2011*		FY 2012*		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	58.6	-	67.6	-	31.1				31.1	-
Procurement	881.2	31	734.2	26	790.6	27	29.8	1	820.4	28
<b>Total</b>	<b>939.8</b>	<b>31</b>	<b>801.8</b>	<b>26</b>	<b>821.7</b>	<b>27</b>	<b>29.8</b>	<b>1</b>	<b>851.5</b>	<b>28</b>

\* FY 2011 & FY 2012 include Base and OCO funding

Numbers may not add due to rounding

## FY 2013 Program Acquisition Costs by Weapon System

### MH-60R Multi-Mission Helicopter

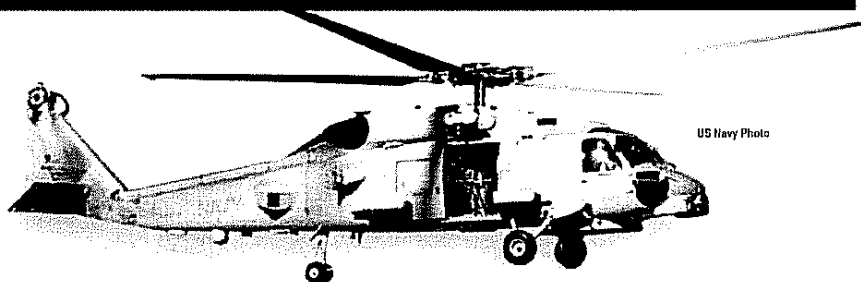
The MH-60R Multi-Mission Helicopter Upgrade program provides battle group protection, and adds significant capability in coastal littorals

and regional conflicts. The upgrade includes new H-60 series airframes, significant avionics improvements, enhancements to the acoustic suite, new radars, and an improved electronics surveillance system.

**Mission:** The MH-60R will be the forward deployed fleet's primary Anti-Submarine and Anti- Surface Warfare platform.

**FY 2013 Program:** Supports 19 helicopters as part of a continuing 5-year multiyear procurement (MYP) for MH-60 airframes, from FYs 2012 to 2016. In addition, the request includes funds for a MYP of MH-60 cockpits and sensors for the same period. The Army serves as the executive agent to execute the UH-60 and MH-60 airframe MYP efforts.

**Prime Contractors:** Airframe: Sikorsky Aircraft, Stratford, CT  
Avionics: Lockheed Martin Corporation, Owego, NY



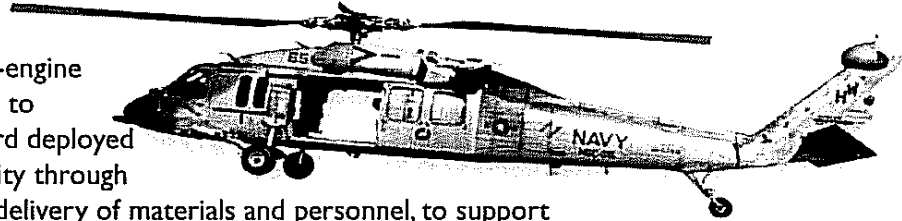
MH-60R Multi-Mission Helicopter										
	FY 2011		FY 2012		FY 2013					
	\$M	Qty	\$M	Qty	Base Budget		OCO Budget		Total Request	
					\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	54.4	-	17.7	-	6.9	-			6.9	-
Procurement	1,021.1	24	985.0	24	842.8	19			842.8	19
Total	1,075.5	24	1,002.7	24	849.7	19	-	-	849.7	19

*Numbers may not add due to rounding*

## FY 2013 Program Acquisition Costs by Weapon System

### MH-60S Fleet Combat Support Helicopter

The MH-60S is a versatile twin-engine helicopter used to maintain forward deployed fleet sustainability through rapid airborne delivery of materials and personnel, to support amphibious operations through search and rescue coverage and to provide an organic airborne mine countermeasures capability.



**Mission:** The MH-60S will conduct vertical replenishment (VERTREP), day/night ship-to-ship, ship-to-shore, and shore-to-ship external transfer of cargo; internal transport of passengers, mail and cargo, vertical onboard delivery; air operations; and day/night search and rescue. Organic Airborne Mine Countermeasures (OAMCM) has been added as a primary mission for the MH-60S. Five separate sensors will be integrated into the MH 60S helicopter and will provide Carrier Battle Groups and Amphibious Readiness Groups with an OAMCM capability.

**FY 2013 Program:** Supports 18 helicopters as part of a follow-on 5-year multiyear procurement (MYP) for MH-60 airframes, from FYs 2012 to 2016. In addition, the request includes funds for a MYP of MH-60 cockpits and sensors for the same period. The Army serves as the executive agent to execute the UH-60 and MH-60 airframe MYP efforts.

**Prime Contractor:** Sikorsky Aircraft, Stratford, CT

### MH-60S Fleet Combat Support Helicopter

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	39.4	-	30.6	-	29.7	-			29.7	-
Procurement	531.7	18	474.7	18	454.1	18			454.1	18
<b>Total</b>	<b>571.1</b>	<b>18</b>	<b>505.3</b>	<b>18</b>	<b>483.8</b>	<b>18</b>	<b>-</b>	<b>-</b>	<b>483.8</b>	<b>18</b>

*Numbers may not add due to rounding*

## FY 2013 Program Acquisition Costs by Weapon System

### P-8A Poseidon

The P-8A Poseidon is an all-weather, twin engine, commercial derivative of the Boeing 737 aircraft. This land-based, network enabled, maritime patrol aircraft is designed to sustain and improve armed maritime and littoral capabilities in traditional, joint, and combined roles to counter changing and emerging threats.



**Mission:** The P-8A Poseidon provides Maritime Patrol Anti-Submarine Warfare (ASW), Anti-Surface Warfare (ASuW), and armed Intelligence, Surveillance and Reconnaissance (ISR) capabilities in maritime and littoral areas above, on and below the surface of the ocean.

**FY 2013 Program:** Supports procurement of 13 P-8A aircraft and associated trainers, support equipment and spares, and provides advance procurement for 17 FY 2014 aircraft. Continues research, development, and testing of the P-8A systems.

**Prime Contractors:** Airframe: The Boeing Company, Seattle, WA  
Engine: CFM International (Snecma/General Electric Aviation), Cincinnati, OH

P-8A Poseidon										
	FY 2011		FY 2012		FY 2013					
	\$M	Qty	\$M	Qty	Base Budget		OCO Budget		Total Request	
					\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	907.5	-	618.7	-	421.1	-	-	-	421.1	-
Procurement	1,903.1	7	2,253.7	11	2,746.4	13	-	-	2,746.4	13
Spares	98.1	-	62.3	-	90.7	-	-	-	90.7	-
	2,908.7	7	2,934.7	11	3,258.2	13	-	-	3,258.2	13

Numbers may not add due to rounding

No modification funding included

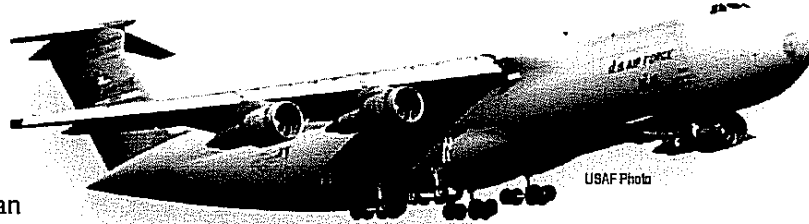
## FY 2013 Program Acquisition Costs by Weapon System

### C-5 Galaxy

USAF

The C-5 Galaxy is the U.S. military's largest aircraft. Using the front and rear cargo openings, the Galaxy can

be loaded and off-loaded at the same time. Both nose and rear doors open the full width and height of the cargo compartment.



**Mission:** The C-5 aircraft is a heavy cargo transport designed to provide strategic inter-theater airlift for deployment and supply of combat and support forces. It can carry fully equipped, combat-ready troops to any area in the world on short notice and provide full field support necessary to maintain a fighting force.

**FY 2013 Program:** Continues the modernization of the C-5 aircraft. The Reliability Enhancement and Re-engining Program (RERP) is the primary modernization program for the C-5 fleet.

**Prime Contractor:** Lockheed Martin Corporation, Marietta, GA

### C-5 Galaxy

	FY 2011*		FY 2012*		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RD&amp;E</b>	55.1	-	12.9	-	35.1	-	-	-	35.1	-
<b>Procurement</b>	949.5	-	1,035.1	-	1,127.6	-	-	-	1,127.6	-
<b>Spares</b>	-	-	116.2	-	117.2	-	-	-	117.2	-
<b>Total</b>	<b>1,004.5</b>	<b>-</b>	<b>1,164.2</b>	<b>-</b>	<b>1,279.9</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,279.9</b>	<b>-</b>

\*FY 2011 & FY 2012 include Base and OCO funding

Numbers may not add due to rounding



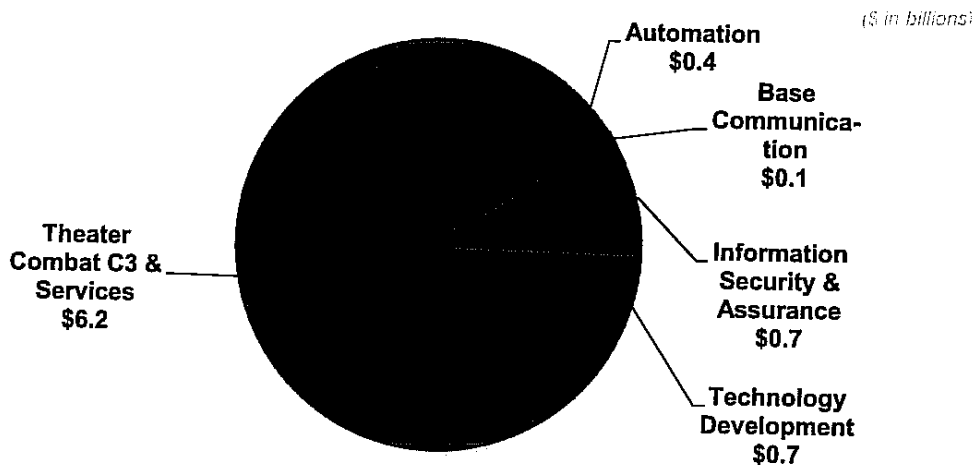
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## Command, Control, Communications, and Computer (C4) Systems

The Department is transforming and developing new concepts for the conduct of future joint military operations. The overarching goal is full spectrum dominance—defeat of any adversary or control of any situation across the full range of military operations—achieved through a broad array of capabilities enabled by an interconnected network of sensors, shooters, command, control, and intelligence. This network-based interconnectivity increases the operational effectiveness by assuring access to the best possible information by decision-makers at all levels, thus allowing dispersed forces to communicate, maneuver, share a common user-defined operating picture, and successfully complete assigned missions more efficiently. Net-centricity transforms the way that information is managed to accelerate decision making, improve joint warfighting, and create intelligence advantages. Hence, all information is visible, available, usable and trusted—when needed and where needed—to accelerate the decision cycles.

Net-centricity is a service-based architecture pattern for information sharing. It is being implemented by the Command, Control, Communications, Computer, and Intelligence (C4I) community via building joint architectures and roadmaps for integrating joint airborne networking capabilities with the evolving ground, maritime, and space networks. It encompasses the development of technologies like gateways, waveforms, network management, and information assurance.

### FY 2013 Command, Control, Communications, and Computers (C4) Systems – Base and OCO: \$8.2 Billion



Source: FY 2013 PRCP – Investment Categorization

Numbers may not add due to rounding

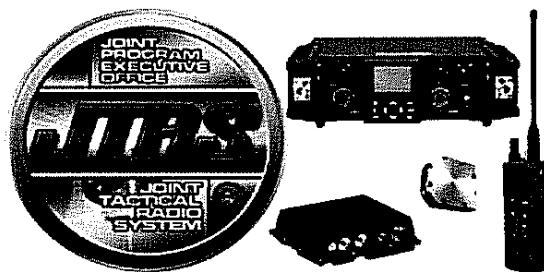


## FY 2013 Program Acquisition Costs by Weapon System

### Joint Tactical Radio System

**DoD - JOINT**

The Joint Tactical Radio System (JTRS) is a joint DoD effort to develop, produce, integrate, test, and field a family of software-defined, secure, multi-channel, digital radios that will be interoperable with existing radios and increase communication and networking capabilities for mobile and fixed sites. The program encompasses ground, airborne, vehicular, maritime, and small form fit variants of the radio hardware, 17 Increment 1 waveforms for porting into the JTRS hardware, and network management applications. All JTRS products are being developed in a joint environment to ensure interoperability and the enhancement of hardware and software commonality and reusability. The JTRS Ground Mobile Radio (GMR) program has been canceled, as the Army has revised its requirements and is seeking a more affordable solution.



**Mission:** The JTRS products will simultaneously receive, transmit, and relay voice, data, and video communications with hardware configurable, software programmable, multi-band, and multi-mode network capable systems.

**FY 2013 Program:** Funds the development, testing, and manufacture of JTRS engineering development models (EDMs), low rate initial production (LRIP), and full rate production (FRP), to include hardware and software, as well as sustainment of fielded radios and certified waveforms.

**Prime Contractors:** General Dynamics Decision Systems, Inc., Scottsdale, AZ  
 Lockheed Martin Corporation, Manassas, VA  
 ViaSat Incorporated, Carlsbad, CA  
 BAE Systems/Rockwell Collins Data Link Solutions, L.L.C., Cedar Rapids, IA  
 ITT Corporation, Fort Wayne, IN

Joint Tactical Radio System										
	FY 2011*		FY 2012*		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	610.5		675.5	-	340.1		-		340.1	-
Procurement	143.6	2,798	502.3	16,882	649.5	11,793	-	-	649.5	11,793
O&M	67.0		66.2	-	63.8		-		63.8	-
Total	821.1	2,798	1,244.1	16,882	1,053.5	11,793	-	-	1,053.5	11,793

\* FY 2011 & FY 2012 include Base and OCO funding

Numbers may not add due to rounding

## FY 2013 Program Acquisition Costs by Weapon System

### Warfighter Information Network-Tactical

USA

The Warfighter Information Network- Tactical (WIN-T) is the Army's on-the-move, high speed, high capability backbone communications network, linking Warfighters in the battlefield with the Global Information Grid (GIG). This network is intended to provide command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR) support capabilities. The system is being developed as a network for reliable, secure and seamless video, data, imagery and voice services for the Warfighters in the theater to enable decisive combat actions.



The WIN-T program consists of four increments. Increment 1 (Inc 1) provides "networking at the halt" by upgrading the Joint Network Node (JNN) satellite capability to access the Ka-band defense Wideband Global Satellite (WGS). Increment 2 (Inc 2) provides an initial networking on-the-move to the battlefield. Increment 3 (Inc 3) provides full networking on-the-move via air tier. Increment 4 (Inc 4) provides protected satellite communications on-the-move.

**Mission:** The WIN-T program provides the United States Army with a transformational modernized network. Using satellite, air, and ground layers, it delivers the fully mobile, flexible, dynamic networking capability needed to support a highly dispersed force over a noncontiguous area.

**FY 2013 Program:** Procures and continues to field WIN-T Inc 1 to the Army, with a Ka satellite upgrade. Fielding of Inc 1 will be completed by the end of 2QFY12, and Inc 1b Material Work Order (MWO) fielding will start in 4QFY12. WIN-T Inc 2 is currently in Limited Rate Initial Production (LRIP) in anticipation of its Initial Operational Test in FY 2012 followed by Full Rate Production in FY 2013. WIN-T Inc 3 continues in its Engineering, Manufacturing, and Development (EMD) phase to deliver full networking on the move, including the airborne tier.

**Prime Contractor:** General Dynamics Corporation, Taunton, MA

**Sub-Contractor:** Lockheed Martin Corporation, Gaithersburg, MD

### Warfighter Information Network-Tactical

	FY 2011*		FY 2012**		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	200.7		185.8		278.0		-		278.0	-
Procurement	467.2	541	865.7	3,318	892.6	2,166	-		892.6	2,166
Spares	24.9		12.1		54.9		-		54.9	-
<b>Total</b>	<b>692.7</b>	<b>541</b>	<b>1,063.6</b>	<b>3,318</b>	<b>1,225.5</b>	<b>2,166</b>	<b>-</b>	<b>-</b>	<b>1,225.5</b>	<b>2,166</b>

\* FY 2011 & FY 2012 include Base and OCO funding

Numbers may not add due to rounding

\*\* Reflects the FY 2012 Appropriation



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## Ground Programs

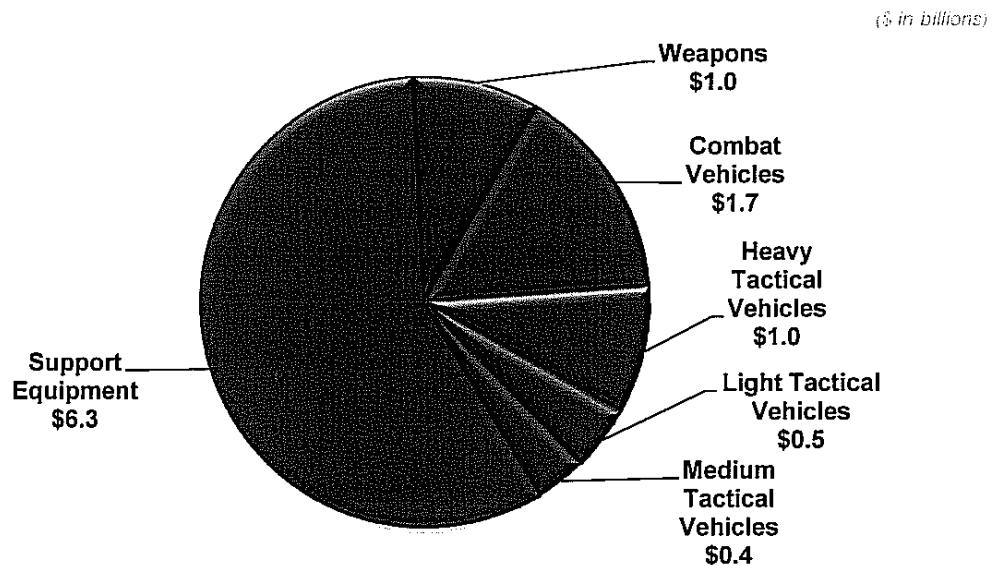
The Department continues to modernize its ground force capabilities to ensure the United States remains a dominant force capable of operating in all environments across the full spectrum of conflict. The Army and Marine Corps equip each soldier and marine with the best equipment available to succeed in both today's and tomorrow's operations.

Modernization and upgrade of selected core systems is a continuous process. Some of the existing programs are targeted for upgrades to include howitzers, Stryker vehicles, M1 Abrams, Bradley Fighting Vehicle, and the Light Armored Vehicle (LAV).

The Army is focused on developing a Ground Combat Vehicle (GCV) to provide a new infantry fighting vehicle to the war fighter. The GCV has the design growth to adapt to capabilities as the operational environment changes and technology matures to position soldiers for long-term success. The Marine Corps is developing the Marine Personnel Carrier (MPC), an advanced generation armored personnel carrier that would provide general support lift to the marine infantry in the ground combat element based maneuver task force.

### FY 2013 Ground Programs – Base and OCO: \$10.9 Billion

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Source: FY 2013 PRCP – Investment Categorization

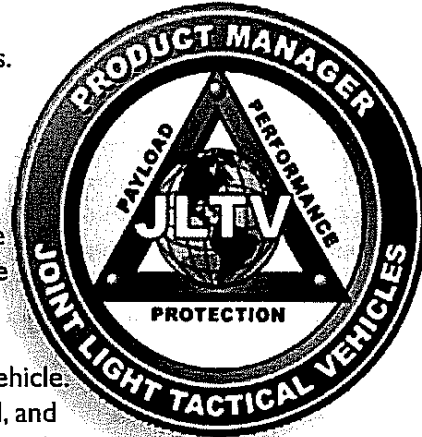
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## FY 2013 Program Acquisition Costs by Weapon System

### Joint Light Tactical Vehicle

**DOD - JOINT**

The Joint Light Tactical Vehicle (JLTV) is a joint program currently in development for the Army and Marine Corps. The JLTV is intended to replace the High Mobility Multipurpose Wheeled Vehicle (HMMWV), which is the current light tactical vehicle. The JLTV concept is based on a family of vehicles focused on scalable armor protection and vehicle agility, and mobility required of the light tactical vehicle fleet. The JLTV will provide Defensive measures to protect troops while in transport, increase payload capability, and achieve commonality of parts and components to reduce the overall life cycle cost of the vehicle. The JLTV project seeks to optimize performance, payload, and protection of the vehicle and crew while ensuring a design that is transportable by CH-47, CH-53, and C-130 aircraft.



**Mission:** As a light tactical vehicle, JLTV will be capable of performing multiple mission roles, and will be designed to provide protected, sustained, networked mobility for personnel and payloads across the full range of military operations. There are three mission role variants: General Purpose 3,500 lb; Infantry Carrier 4,500 lb; and Utility 5,100 lb.

**FY 2013 Program:** Continues engineering and manufacturing development (EMD) efforts, which are scheduled to begin in 3<sup>rd</sup> quarter of FY 2012.

**Prime Contractor:** Currently in technology development.

### Joint Light Tactical Vehicle

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E USA	30.9	-	87.2	-	72.3	-	-	-	72.3	-
RDT&E USMC	18.4	-	46.9	-	44.5	-	-	-	44.5	-
<b>Total</b>	<b>49.3</b>	<b>-</b>	<b>134.1</b>	<b>-</b>	<b>116.8</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>116.8</b>	<b>-</b>

*Numbers may not add due to rounding*

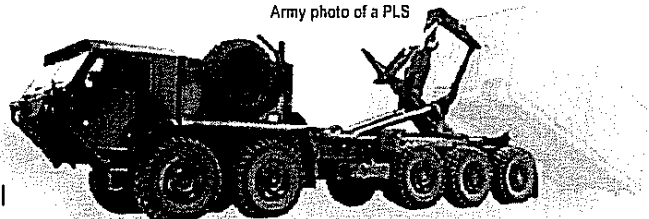
## FY 2013 Program Acquisition Costs by Weapon System

### Family of Heavy Tactical Vehicles



The Family of Heavy Tactical Vehicles (FHTV) consists of the Palletized Load System (PLS) and the Heavy Expanded Mobility Tactical Truck (HEMTT).

The PLS entered service in 1993 and consists of a 16.5 ton, 10 wheel tactical truck with self load/unload capability. The PLS carry payload on flat rack cargo bed, trailer, or International Standards Organization (ISO) containers. The HEMTT is a 10-ton, 8 wheel (8x8) truck that comes in several configurations: The Tanker to refuel tactical vehicles and helicopters, Tractor to tow the Patriot missile system and Multi-Launch Rocket System (MLRS), Wrecker to recover vehicles, and Cargo truck with a materiel handling crane. The HEMTT entered service in 1982.



**Mission:** Provides transportation of heavy cargo to supply and re-supply combat vehicles and weapons systems. The PLS is fielded to transportation units, ammunition units, and to forward support battalions with the capability to self-load and transport a 20 ft. ISO container. The HEMTT A4 is an important truck to transport logistics behind quick-moving forces such as the M-1 Abrams and Stryker. The HEMTT is used in line haul, local haul, unit resupply, and other missions throughout the tactical environment to support modern and highly mobile combat units. The HEMTT trucks carry all types of cargo, especially ammunition and fuel.

**FY 2013 Program:** Procures 1,534 FHTV vehicles, and also trailers and tracking systems to modernize the heavy tactical vehicle fleet for the Active, National Guard, and Reserve units and to fill urgent theater requirements.

**Prime Contractor:** Oshkosh Corporation, Oshkosh, WI

### Family of Heavy Tactical Vehicles

	FY 2011*		FY 2012*		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RDT&amp;E</b>	2.8	-	5.4	-	3.1	-	-	-	3.1	-
<b>Procurement</b>	746.5	12,240	645.0	9,336	52.9	1,534	2.1	-	55.0	1,534
<b>Total</b>	<b>749.3</b>	<b>3,162</b>	<b>650.4</b>	<b>9,336</b>	<b>56.0</b>	<b>1,534</b>	<b>2.1</b>	<b>-</b>	<b>58.1</b>	<b>1,534</b>

\* FY 2011 & FY 2012 include Base and OCO funding.

Numbers may not add due to rounding

## FY 2013 Program Acquisition Costs by Weapon System

### Family of Medium Tactical Vehicles

The Family of Medium Tactical Vehicles (FMTV) is a family of diesel powered trucks in the 2 1/2 ton and 5 ton payload class. The vehicle first went into service in 1996. It capitalizes on current state of the art automotive technology including a diesel engine, automatic transmission, and central tire inflation system (CTIS). The use of common chassis, engines, tires, and cabs are features over 80 percent commonality of parts between models and weight classes, which significantly reduces the logistics burden and operating costs. Numerous models perform a wide variety of missions including cargo transport (cargo model), vehicle recovery operations (wrecker), construction (dump), line haul (tractor), and airdrop missions, and civil disaster relief. The FMTV also serves as the platform for the High Mobility Artillery Rocket System (HIMARS) and support vehicle for the Patriot missile.

DoD Photo



**Mission:** The FMTV provides unit mobility and resupply of equipment and personnel for rapidly deployable worldwide operations on primary and secondary roads, trails, cross-country terrain, and in all climatic conditions. It is strategically deployable in C-5, C-17, and C-130 aircraft. Experience in Iraq led to the development of an up-armored cab known as the Low Signature Armored Cab (LSAC) for installation on FMTV vehicles that adds ballistic and mine blast protection for the crew.

**FY 2013 Program:** Procures 1,248 Medium Tactical Vehicles in the baseline budget and 223 vehicles in the Overseas Contingency Operations budget to support the Army modular transformation effort to modernize the tactical wheeled vehicle fleet for medium size trucks.

**Prime Contractor:** Oshkosh Corporation, Oshkosh, WI

### Family of Medium Tactical Vehicles

	FY 2011*		FY 2012*		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	3.6	-	4.0	-	3.0	-	-	-	3.0	-
Procurement	1,088.5	7,484	434.0	2,524	346.1	1,248	28.3	223	374.4	1,471
<b>Total</b>	<b>1,092.1</b>	<b>7,484</b>	<b>438.0</b>	<b>2,524</b>	<b>349.1</b>	<b>1,248</b>	<b>28.3</b>	<b>223</b>	<b>377.4</b>	<b>1,471</b>

\* FY 2011 & FY 2012 include Base and OCO funding

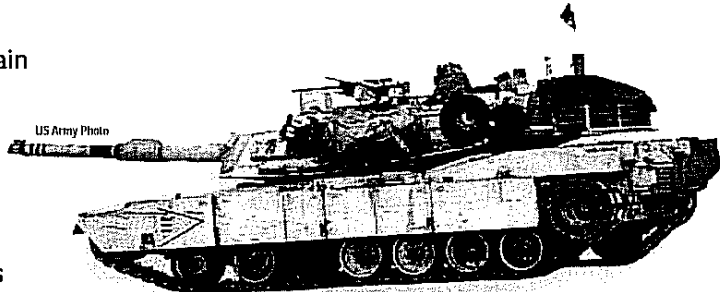
Numbers may not add due to rounding

## FY 2013 Program Acquisition Costs by Weapon System

### M-I Abrams Tank Upgrade

USA

The M1 Abrams is the Army's main battle tank, which first entered service in 1980. It was produced from 1978 until 1992. Since then, the Army has modernized it with a series of upgrades to improve its capabilities. The current M1 Abrams tank modernization effort supports two variants. The M1A1 Situational Awareness (SA) and the M1A2 System Enhancement Program (SEP). The M1A1 SA modernization includes steel encased depleted uranium for increased frontal and turret side armor protection, suspension improvements, an advanced computer system with embedded diagnostics, a second generation thermal sensor, and a laser rangefinder to designate targets from increased distances. The M1A2 SEP tank modernization includes a commander's independent thermal weapons station, position navigation equipment, improved fire control system, and an improved AGT1500 turbine engine.



**Mission:** The M1A2 Abrams is the Army's main battle tank that provides mobile and protected firepower for battlefield superiority against heavy armor forces.

**FY 2013 Program:** Provides system technical support to complete the final M1A2 Abrams System Enhancement Package (SEP) production, fielding, and training.

**Prime Contractor:** General Dynamics Corporation, Sterling Heights, MI

### M-I Abrams Tank Upgrade

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	93.6	-	9.6	-	-	-	-	-	-	-
Procurement	182.0	21	436.3	63	74.4	-	-	-	74.4	-
Spares	18.8	-	7.2	-	-	-	-	-	-	-
Total	294.4	21	453.1	63	74.4	-	-	-	74.4	-

*Numbers may not add due to rounding*



## Stryker Family of Armored Vehicles

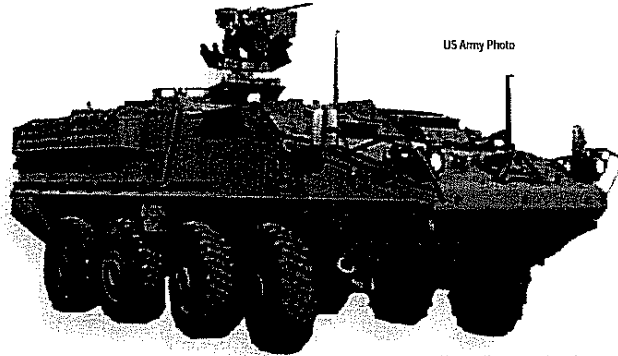
Stryker is a 19-ton wheeled armored vehicle that will provide the Army a family of ten different vehicles. The Stryker can be deployed by C-130, C-17, and C-5 aircraft and be combat-capable upon arrival in any contingency area. It can reach speeds of 62 mph on the highway and has a maximum range of 312 miles.

There are two basic versions, which include the Infantry Carrier Vehicle (ICV) and the Mobile Gun System (MGS). There are eight different configurations, which include the Reconnaissance Vehicle (RV); Anti-Tank Guided Missile (ATGM); Nuclear, Biological, Chemical, and Radiological Vehicle (NBCRV); Medical Evacuation Vehicle (MEV) Commander's Vehicle (CV); Fire Support Vehicle (FSV); Mortar Carrier (MC); and Engineer Squad Vehicle (ESV).

**Mission:** The Stryker vehicle is designed to enable the Brigade Combat Team to maneuver more easily in close and urban terrain while providing protection in open terrain. It fills the Army's current transformation goal to equip a strategically deployable brigade using a C-17 or C-5 and operationally deployable brigade using a C-130 that is capable of rapid movement anywhere on the globe in a combat ready configuration.

**FY 2013 Program:** Procures 58 Stryker NBCRV variant vehicles in FY 2013.

**Prime Contractor:** General Dynamics Corporation, Sterling Heights, MI



## Stryker Family of Armored Vehicles

	FY 2011*		FY 2012		FY 2013					
	\$M	Qty	\$M	Qty	Base Budget		OCO Budget		Total Request	
					\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	200.3	-	65.4	-	14.3	-	-	-	14.3	-
Procurement	1,386.0	292	606.9	100	286.8	58	-	-	286.8	58
Spares	-	-	99.6	-	31.2	-	-	-	31.2	-
<b>Total</b>	<b>1,586.3</b>	<b>292</b>	<b>771.9</b>	<b>100</b>	<b>332.3</b>	<b>58</b>	<b>-</b>	<b>-</b>	<b>332.3</b>	<b>58</b>

\* FY 2011 includes Base and OCO funding.

Numbers may not add due to rounding

## **Missile Defense**

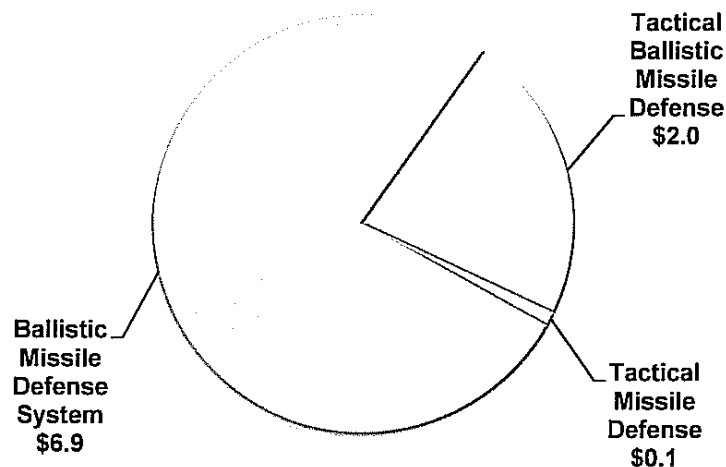
Missile Defense is a general term for air and missile defense. This category includes cruise missile, air and ballistic missile defense systems program development. The Missile Defense Agency and the Army are the program developers. Missile Defense includes all components designed to defeat hostile ballistic missiles of various ranges. A missile defense system includes interceptor missiles, as well as the associated sensors and command, control, battle management, and communications. Other significant investments include construction, targets and countermeasures, and research, development, testing, and evaluation activities. Encompassed in this category are all programs that are either critical to the functionality of missile defense or support missile defense as a primary mission.

The Department continues to invest and build inventories of air and missile defense capabilities, such as the Patriot Advanced Capability-3 (PAC-3) missiles, Standard Missile-3 (SM-3) interceptors, Terminal High Altitude Area Defense (THAAD) interceptors, and the Army Navy/Transportable Radar Surveillance-2 (AN/TPY-2) radar. Further, the Department continues to seek expanded international efforts for missile defense with allies and partners to provide pragmatic and cost-effective missile defense capabilities.

### **FY 2013 Missile Defense – Base and OCO: \$9.0 Billion**

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(\$, in billions)



Source: FY 2013 PRCP – Investment Categorization

Numbers may not add due to rounding

Note: \$9.0 billion does not include the Missile Defense Agency's Science and Technology (\$388 million), Military Construction (\$188 million), nor the Operation and Maintenance (\$260 million) funding. The total Ballistic Missile Defense funding is \$9.7 billion for the FY 2013 request.

## FY 2013 Program Acquisition Costs by Weapon System

### Ballistic Missile Defense

**DOD - JOINT**

The Ballistic Missile Defense (BMD) program provides defensive capabilities against ballistic missile threats from rogue nations or accidental or unauthorized launches. Ballistic missile defense is an integrated layered system, to include sea, ground, air and space elements, capable of intercepting any range of threat in the boost, midcourse or terminal phases of flight. Major elements of BMD include the Patriot Advanced Capability-3 (PAC-3) Missile, the PAC-3 Missile Segment Enhancement (MSE), the Aegis BMD, the Terminal High Altitude Area Defense (THAAD), and the Ground-based Midcourse Defense (GMD).

**Mission:** Develop, field, and sustain a missile defense capability to defend the United States against limited ballistic missile attack, and defense against regional ballistic missile threats to U.S. forces, allies, and partners.

**FY 2013 Program:** Continues the research, development, testing, fielding and conversion and integration of Aegis BMD capable ships, along with the sustainment of ballistic missile defense programs. Continues the production and fielding of THAAD and the Army Navy/Transportable Radar Surveillance-2 (AN/TPY-2) Forward Based Mode Radar. Provides the development, sustainment and flight test rotation for GMD.

**Prime Contractors:** Boeing, Lockheed Martin, Northrop Grumman, Raytheon

### Ballistic Missile Defense

	FY 2011*		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RDT&amp;E</b>	8,675.6	-	7,693.6	-	7,327.9	-	-	-	7,327.9	-
<b>Procurement</b>	1,768.5	-	2,460.9	-	1,927.6	-	-	-	1,927.6	-
<b>Spares</b>	7.0	-	6.7	-	17.0	-	-	-	17.0	-
<b>MILCON</b>	-	-	67.2	-	188.3	-	-	-	188.3	-
<b>BRAC</b>	8.7	-	-	-	-	-	-	-	-	-
<b>O&amp;M</b>	-	-	202.3	-	260.0	-	-	-	260.0	-
<b>Total</b>	<b>10,459.8</b>	<b>-</b>	<b>10,430.7</b>	<b>-</b>	<b>9,720.8</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9,720.8</b>	<b>-</b>

Note: Funding includes more than investment resources.

Numbers may not add due to rounding.

Includes the Missile Defense Agency's FY 2013 Military Construction (\$188 million), Science and Technology (\$388 million), and Operation and Maintenance (\$260 million) resources.

Includes the Army's modifications and spare resources.

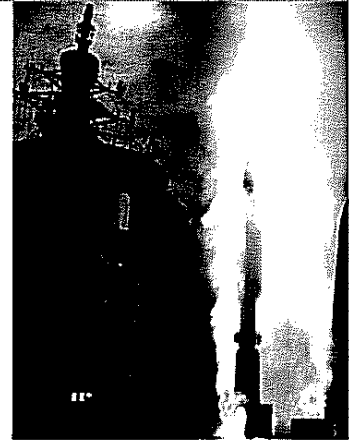
Includes Patriot PAC-3 OCO resources (FY 2011, \$18 million).

## FY 2013 Program Acquisition Costs by Weapon System

### Aegis Ballistic Missile Defense

**DOD - JOINT**

The Aegis Ballistic Missile Defense System (BMDS) is a key sea-based element of the Ballistic Missile Defense program and provides an enduring, operationally effective and supportable BMD capability on Aegis cruisers and destroyers. The Aegis BMD builds upon the existing Navy Aegis Weapons System (AWS) and Standard Missile-3 (SM-3) capabilities. The Aegis BMD upgrades expand capability through a series of incremental, evolutionary improvements to counter more difficult threats and provide limited engagements in the terminal phase of flight.



**Mission:** The Aegis BMDS provides a forward-deployable, mobile capability to detect and track ballistic missiles of all ranges, and the ability to destroy short- medium-, intermediate-range ballistic missiles, and selected long-range class threats in the midcourse phase of flight. The Aegis BMD delivers an enduring, operationally effective and supportable capability on Aegis cruisers and destroyers in defense of the U.S., deployed forces, and friends and allies.

**FY 2013 Program:** Completes manufacturing development of 24 SM-3 Block IB interceptors incrementally funded, and supports procurement of 29 SM-3 Block IB missiles. Also procures BMD upgrades for four Aegis ships and installation onboard five Aegis Ships. Continues the development of the Aegis BMD Weapon System 5.0 and 5.1.

**Prime Contractors:** Aegis Weapon System: Lockheed Martin Corporation,  
Moorestown, NJ

SM-3 Interceptor: Raytheon Company, Tucson, AZ

### AEGIS Ballistic Missile Defense

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RDT&amp;E</b>	1,530.8	-	988.9	-	992.4	-	-	-	992.4	-
<b>Procurement</b>	283.3	26	565.4	46	389.6	29	-	-	389.6	29
<b>Total</b>	<b>1,814.0</b>	<b>26</b>	<b>1,554.3</b>	<b>46</b>	<b>1,382.0</b>	<b>29</b>	<b>-</b>	<b>-</b>	<b>1,382.0</b>	<b>29</b>

Quantity is associated with SM-3 interceptors

Numbers may not add due to rounding

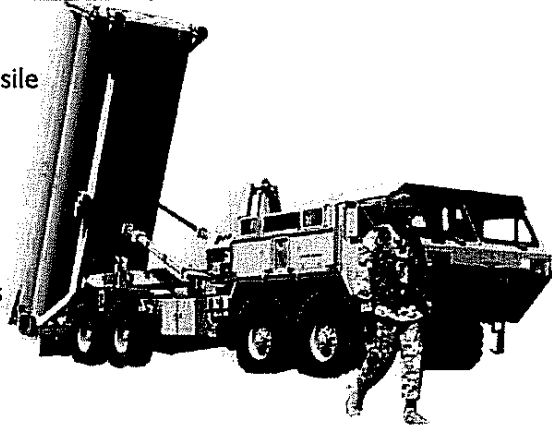
Does not include Aegis Operation and Maintenance funding

## FY 2013 Program Acquisition Costs by Weapon System

### THAAD Ballistic Missile Defense

**DOD - JOINT**

The Terminal High Altitude Area Defense (THAAD) is a key element of the Ballistic Missile Defense System. The THAAD Battery will provide rapidly-transportable interceptors, using "Hit-To-Kill" technology to destroy ballistic missiles inside and outside the atmosphere. A Battery consists of six truck-mounted launchers, 48 interceptors (8 per launcher), one AN/TPY-2 radar, and one Tactical Fire Control/Communications (TFCC) component.



**Mission:** Provide Combatant Commanders with a rapidly deployable, ground-based missile defense capability against short and medium-range ballistic missiles and asymmetric threats inside and outside the atmosphere.

**FY 2013 Program:** Supports procurement of 36 interceptors and associated components, as well as support and training equipment. Also supports the development of the initial Build 2.0 capability, and continues development and testing of THAAD components.

**Prime Contractor:** Lockheed Martin Corporation, Sunnyvale, CA

### Terminal High Altitude Area Defense (THAAD)

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	420.8	-	290.1	-	316.9	-	-	-	316.9	-
Procurement	583.6	22	709.2	42	460.7	36	-	-	460.7	36
<b>Total</b>	<b>1,004.5</b>	<b>22</b>	<b>999.2</b>	<b>42</b>	<b>777.7</b>	<b>36</b>	<b>-</b>	<b>-</b>	<b>777.7</b>	<b>36</b>

Quantity is associated with THAAD Interceptors

Numbers may not add due to rounding

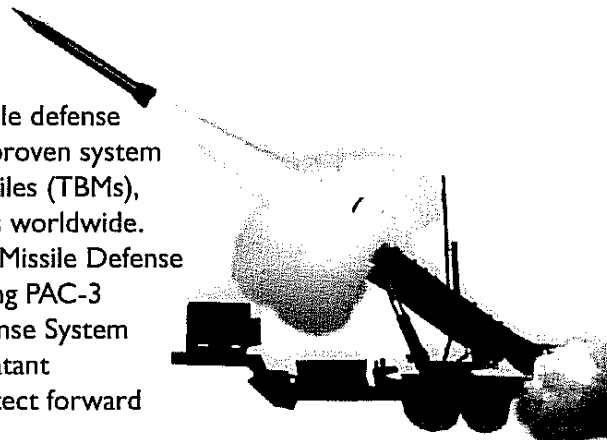
Does not include THAAD's Operation and Maintenance funding

## FY 2013 Program Acquisition Costs by Weapon System

### Patriot/PAC-3

**DOD - JOINT**

The Army's Patriot Advanced Capability (PAC-3) missile is the latest improvement to the Patriot air and missile defense system. The Patriot is the only combat-proven system capable of defeating Tactical Ballistic Missiles (TBMs), Cruise Missiles, and Air-Breathing threats worldwide. Joint efforts between the Army and the Missile Defense Agency have been successful in integrating PAC-3 capabilities into the Ballistic Missile Defense System (BMDS). The PAC-3 units are the combatant commanders' most capable asset to protect forward deployed forces.



**Mission:** The Patriot system contributes to the BMDS overall situational awareness for short range terminal ballistic missile threats. It can cue other systems while protecting Joint assets. The Patriot forces remain forward stationed in multiple theaters of operations, and the Army just recently activated its 15<sup>th</sup> Patriot battalion.

**FY 2013 Program:** Supports procurement of 84 PAC-3 missiles and upgrades to 38 Electronic Launcher Enhanced Systems (ELES) to enable launchers to fire the PAC-3 missile. Provides for the testing and fielding of the latest Patriot system software upgrades to reduce fratricide risk and enhance Patriot capability against the current threat.

**Prime Contractor:** Lockheed Martin Missiles and Fire Control, Dallas, TX

Patriot/PAC-3										
	FY 2011*		FY 2012		FY 2013					
	\$M	Qty	\$M	Qty	Base	OCO		Total		Qty
					\$M	Qty	\$M	Qty	\$M	
RDT&E	11.1	-	42.8	-	110.0	-	-	-	110.0	-
Procurement	628.4	78	662.2	88	646.6	84	-	-	646.6	84
Spares	7.0	-	6.7	-	6.8	-	-	-	6.8	-
Total	646.5	78	711.8	88	763.4	84	-	-	763.4	84

Quantity is associated with PAC-3 Missiles

FY 2011 includes Base and OCO funding

Numbers may not add due to rounding

No modification funding included

## FY 2013 Program Acquisition Costs by Weapon System

### Patriot/MEADS

**DOD - JOINT**

The Medium Extended Air Defense System (MEADS) is a cooperative effort among the United States, Germany, and Italy to develop an advanced ground based air and tactical ballistic missile defense capability.



The MEADS is designed to be a highly mobile, tactically deployable system providing defense to critical assets, including ballistic and cruise missiles, and other air breathing threats. Mounted on wheeled vehicles, the system includes launchers carrying Missile Segment Enhancement (MSE) and advanced radars that will provide 360-degree coverage on the battlefield. The MEADS provides improvements in strategic deployment, transportability, mobility, and maneuverability.

**Mission:** The MEADS will provide the United States and its allied forces with the capability to defend against multiple and simultaneous attacks by Tactical Ballistic Missiles (TBMs), Cruise Missiles and other Air Breathing Threats (ABTs) at intermediate ranges.

**FY 2013 Program:** Completes developmental approach testing and demonstration of the MEADS capability, allowing the United States, Germany and Italy to harvest suitable technology from the program for use in existing air defense architectures.

**Prime Contractor:** MEADS International, Orlando, FL

Patriot/MEADS									
	FY 2011		FY 2012		FY 2013				
	\$M	Qty	\$M	Qty	Base Budget		OCO Budget		Total Request
					\$M	Qty	\$M	Qty	\$M Qty
RDT&E	450.6	-	389.6	-	400.9	-	-	-	400.9 -
Procurement	-	-	-	-	-	-	-	-	- -
<b>Total</b>	<b>450.6</b>	<b>-</b>	<b>389.6</b>	<b>-</b>	<b>400.9</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>400.9 -</b>

*Numbers may not add due to rounding*

## FY 2013 Program Acquisition Costs by Weapon System

### PAC-3/MSE Missile

**DOD - JOINT**

The Missile Segment Enhancement (MSE) is a performance improvement to the existing Patriot Advanced Capability (PAC-3) missile. The MSE upgrade enhances the PAC-3 missile by adding a dual pulse, 11-inch diameter



Solid Rocket Motor (SRM), improved lethality, a thermally hardened front-end, upgraded batteries, enlarged fixed fins, more responsive control surfaces, and upgraded guidance software. These improvements result in a more agile, lethal interceptor missile with enhanced Insensitive Munitions (IM) compliance. The PAC-3 MSE can be fired from a Patriot system. It is also the internationally accepted missile for the Medium Extended Air Defense System (MEADS).

**Mission:** The PAC-3 MSE is a hit-to-kill, surface-to-air missile that can intercept tactical ballistic missiles, cruise missiles, and air-breathing threats that have chemical, biological, radiological, nuclear and conventional high explosive warheads. The MSE extends the PAC-3 range, filling a critical performance gap, and affords greater protection for U.S. and allied forces.

**FY 2013 Program:** Supports the development, testing and integration of the PAC-3 MSE in the Patriot system, as well as the development and testing of selected Patriot ground equipment upgrades. Also completes the facilitization of the initial production (e.g., tooling) effort that began in FY 2012.

**Prime Contractor:** Lockheed Martin Missiles and Fire Control, Dallas, TX

PAC-3/MSE										
	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	121.5	-	88.9	-	69.0	-	-	-	69.0	-
Procurement	-	-	75.0	-	12.9	-	-	-	12.9	-
Total	121.5	-	163.9	-	81.9	-	-	-	81.9	-

*Numbers may not add due to rounding*

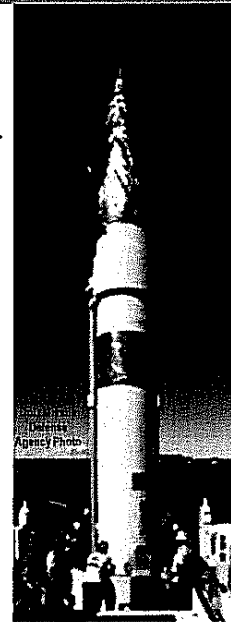


## FY 2013 Program Acquisition Costs by Weapon System

### Ground-based Midcourse Defense

**DOD - JOINT**

The Ground-based Midcourse Defense (GMD) element is a key component of the Ballistic Missile Defense System (BMDS), providing Combatant Commanders capability to engage ballistic missiles in the midcourse phase of flight. This phase, compared to boost or terminal, allows significant time for sensor viewing from multiple platforms and, thus, provides multiple engagement opportunities for hit-to-kill interceptors. The Ground-Based Interceptor (GBI) is made up of a three-stage, solid fuel booster and an exo-atmospheric kill vehicle. When launched, the booster missile carries the kill vehicle toward the target's predicted location in space. Once released from the booster, the 152 pound kill vehicle uses data received in-flight from ground-based radars and its own on-board sensors to hit directly the incoming missile by ramming the warhead with a closing speed of approximately 15,000 miles per hour. Interceptors are currently emplaced at Fort Greely, Alaska and Vandenberg Air Force Base, California. The GMD fire control centers have been established in Colorado and Alaska.



**Mission:** Provides the Combatant Commanders the capability to defend the United States, including Hawaii and Alaska, against limited long range ballistic missiles during the midcourse phase of flight.

**FY 2013 Program:** Supports the development and testing and deployment of 26 GBIs at Fort Greely, Alaska, and 4 at Vandenberg Air Force Base, California. Completes post flight test analysis of the Flight Test Ground Based Interceptor - 06b mission and concludes the GMD Return To Intercept program. Continues manufacturing of Capability Enhancement II GBIs and upgrades to the deployed Capability Enhancement I GBIs. Provides for the continued use of the flight test rotation plan, where older CE-I GBIs will be configured for flight testing to support the Integrated Master Test Plan ). Continues the Stockpile Reliability Program and component aging testing in order to understand the health of the deployed assets. Continues design for additional GBIs that will be used to maintain the operational inventory as future testing assets are required. Completes the preliminary design efforts and initiates construction efforts for an In-Flight Interceptor Communications System Data Terminal at Fort Drum.

**Prime Contractor:** Boeing Defense and Space (BDS), St. Louis, MO

### Ground-based Midcourse Defense

	FY 2011		FY 2012		FY 2013					
	\$M	Qty	\$M	Qty	Base Budget		OCO Budget		Total Request	
					\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	1,245.5	-	1,159.5	5	903.2	5	-	-	903.2	5
Procurement	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>1,245.5</b>	<b>-</b>	<b>1,159.5</b>	<b>5</b>	<b>903.2</b>	<b>5</b>	<b>-</b>	<b>-</b>	<b>903.2</b>	<b>5</b>

*Numbers may not add due to rounding*

## FY 2013 Program Acquisition Costs by Weapon System

### Army Navy/Transportable Radar Surveillance-2

**DOD - JOINT**

The Army Navy/Transportable Radar Surveillance (AN/TPY-2) is a transportable X-band, high resolution, phased-array radar designed specifically for ballistic missile defense. The AN/TPY-2 is capable of tracking all classes of ballistic missiles and identifying small objects at long distances. This radar in the forward-based mode acts as advanced "eyes" for the Ballistic Missile Defense System (BMDS),



detecting ballistic missiles early in their flight and provides precise tracking information. The same radar provides surveillance, track, discrimination and fire control support for the Terminal High Altitude Area Defense (THAAD) weapon system. Also included in the BMDS network of sensors are the Cobra Dane Radar at Eareckson Air Force Station in Alaska and the Upgraded Early Warning Radars at Beale Air Force Base, Fylingdales RAF Station, UK, and Thule Air Force Station in Greenland.

**Mission:** In a forward-based role, the AN/TPY-2 provides target detection and tracking during the boost phase, reducing uncertainty in target discrimination and reaction time, and increasing the probability of a successful BMDS engagement. In terminal mode, the AN/TPY-2 provides target acquisition, tracking, and discrimination for fire control of the THAAD Battery. The AN/TPY-2 is a globally transportable, rapidly deployable radar, adding flexibility to response to geographical changes in threat.

**FY 2013 Program:** Supports the development, testing, and sustainment of AN/TPY-2 radars. Provides funding for operational sustainment and support of the deployed AN/TPY-2 radars to geographical areas. Provides procurement of one AN/TPY-2 radar, and continues to fund and support UEWR software upgrades and continues to upgrade of the Clear Early Warning Radar to incorporate missile defense functionality.

**Prime Contractor:** Raytheon Corporation, Waltham, MA

### Ballistic Missile Defense Sensors (AN/TPY-2)

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RDT&amp;E</b>	389.3	-	222.1	-	347.0	-	-	-	347.0	-
<b>Procurement</b>	-	-	380.2	2	217.2	1	-	-	217.2	1
<b>Spares</b>	-	-	-	-	10.2	-	-	-	10.2	-
<b>Total</b>	<b>389.3</b>	<b>-</b>	<b>602.3</b>	<b>2</b>	<b>574.4</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>574.4</b>	<b>1</b>

Quantity is associated with AN/TPY-2 Radar

Numbers may not add due to rounding

Does not include AN/TPY-2 Operation and Maintenance funding



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## **Munitions and Missiles**

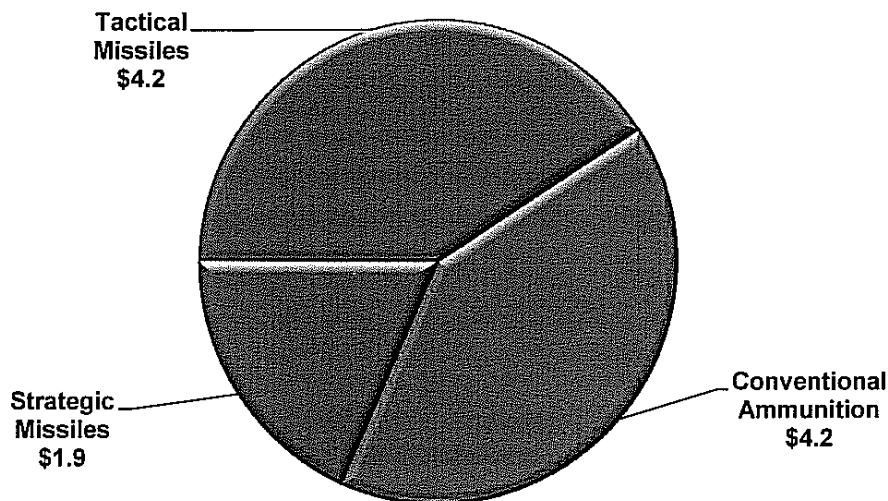
Munitions is a general term for ammunition and missiles including conventional ammunition, bombs, missiles, warheads, and mines. This category includes conventional and nuclear weapons and weapons used for both tactical and strategic purposes. Many of the missiles and munitions are precision guided with the technical sophistication to allow guidance corrections during flight-to-target. Some programs include non-explosive articles that enhance the performance of other munitions. For example, the Joint Direct Attack Munitions (JDAM) adds guidance capability when attached to a gravity bomb, making it a “smart” bomb. *Note: Interceptor missiles supporting the missile defense mission are included in the Missile Defense section.*

The Department continues to build inventories of standoff weaponry, such as the Joint Air-to-Surface Standoff Missile, the Joint Standoff Weapon, and the Small Diameter Bomb.

### **FY 2013 Munitions and Missiles – Base and OCO: \$10.3 Billion**

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*(\$ in billions)*



Source: FY 2013 PRCP – Investment Categorization

Numbers may not add due to rounding

## FY 2013 Program Acquisition Costs by Weapon System

### Advanced Med. Range Air-to-Air Missile

**DOD - JOINT**



The Advanced Medium Range Air-to-Air Missile (AMRAAM) is an all-weather, all-environment radar guided missile developed to improve capabilities against very low-altitude and high-altitude, high-speed targets in an electronic countermeasures environment. The AMRAAM is a joint Navy/Air Force program led by the Air Force.

**Mission:** The mission of the AMRAAM is to destroy low and high altitude, high-speed enemy targets in an electronic countermeasures environment. The AMRAAM is a fire-and-forget air-to-air missile, and has replaced the AIM-7 Sparrow as the U.S. military's standard beyond visual range intercept missile. The missile has undergone various service life improvements. The current generation AIM-120D, has a two-way data link, Global Position System-enhanced Inertial Measurement Unit, an expanded no-escape envelope, improved High-Angle Off-Boresight capability, and increase in range over previous variants.

**FY 2013 Program:** Continues full rate production as well as product improvements such as fuzing, guidance, and kinematics.

**Prime Contractor:** Raytheon Company, Tucson, AZ

### Advanced Medium Range Air-to-Air Missile

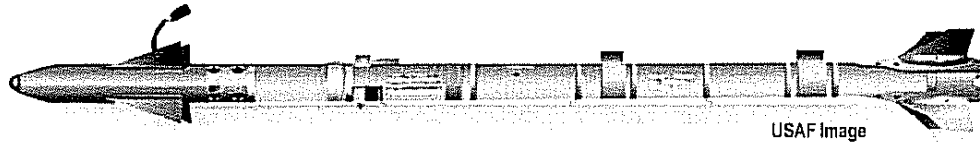
	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RDT&amp;E</b>										
Air Force	60.8	-	77.8	-	87.0	-	-	-	87.0	-
Navy	2.6	-	2.9	-	2.9	-	-	-	2.9	-
<b>Subtotal</b>	<b>63.4</b>	<b>-</b>	<b>80.7</b>	<b>-</b>	<b>89.9</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>89.9</b>	<b>-</b>
<b>Procurement</b>										
Air Force	346.4	246	202.2	138	229.6	113	-	-	229.6	113
Navy	144.7	101	105.1	67	102.7	67	-	-	102.7	67
<b>Subtotal</b>	<b>491.1</b>	<b>347</b>	<b>307.3</b>	<b>205</b>	<b>332.3</b>	<b>180</b>	<b>-</b>	<b>-</b>	<b>332.3</b>	<b>180</b>
<b>Spares</b>	0.5	-	0.7	-	1.0	-	-	-	1.0	-
<b>Total</b>	<b>555.0</b>	<b>347</b>	<b>388.7</b>	<b>205</b>	<b>423.2</b>	<b>180</b>	<b>-</b>	<b>-</b>	<b>423.2</b>	<b>180</b>

*Numbers may not add due to rounding*

## FY 2013 Program Acquisition Costs by Weapon System

### Air Intercept Missile – 9X

**DOD - JOINT**



The Air Intercept Missile-9X (AIM-9X), also known as SIDEWINDER, is a short range air-to-air missile that provides a launch-and-leave air combat missile, which uses passive infrared energy for acquisition and tracking of enemy aircraft. The AIM-9X retains several components from the previous Sidewinder generation, the AIM-9M (primarily the motor and warhead), but incorporates a new airframe with much smaller fins and canards, and relies in a jet-vane steering system for significantly enhanced agility. The new guidance unit incorporates an imaging infrared seeker. The AIM-9X is a joint Navy/Air Force program led by the Navy.

**Mission:** The mission of the AIM-9X is to destroy low and high altitude, high-speed enemy targets in an electronic countermeasures environment.

**FY 2013 Program:** Continues full rate production as well as product improvements, such as data link capabilities, and battery and safety improvements.

**Prime Contractor:** Raytheon Company, Tucson, AZ

### Air Intercept Missile – 9X

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RDT&amp;E</b>										
Air Force	5.8	-	8.0	-	8.2	-	-	-	8.2	-
Navy	0.9	-	8.8	-	21.1	-	-	-	21.1	-
<b>Subtotal</b>	<b>6.7</b>	<b>-</b>	<b>16.8</b>	<b>-</b>	<b>29.3</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>29.3</b>	<b>-</b>
<b>Procurement</b>										
Air Force	64.2	178	88.8	125	88.0	164	-	-	88.0	164
Navy	49.1	64	42.2	68	80.2	150	-	-	80.2	150
<b>Subtotal</b>	<b>113.3</b>	<b>242</b>	<b>131.0</b>	<b>193</b>	<b>168.2</b>	<b>314</b>	<b>-</b>	<b>-</b>	<b>168.2</b>	<b>314</b>
<b>Spares</b>	<b>2.7</b>	<b>-</b>	<b>2.5</b>	<b>-</b>	<b>2.7</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.7</b>	<b>-</b>
<b>Total</b>	<b>122.7</b>	<b>242</b>	<b>150.3</b>	<b>193</b>	<b>200.2</b>	<b>314</b>	<b>-</b>	<b>-</b>	<b>200.2</b>	<b>314</b>

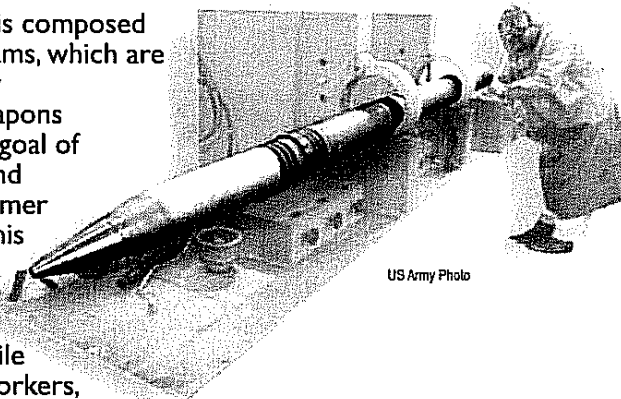
*Numbers may not add due to rounding*

## FY 2013 Program Acquisition Costs by Weapon System

### Chemical Demilitarization

**DOD - JOINT**

The Chemical Demilitarization Program is composed of two Major Defense Acquisition Programs, which are the U.S. Army Chemical Materials Agency (CMA) and the Assembled Chemical Weapons Alternatives (ACWA) Program, with the goal of destroying a variety of chemical agents and weapons, including the destruction of former chemical weapon production facilities. This program is designed to eliminate the existing chemical weapons stockpile in compliance with the Chemical Weapons Convention (CWC) signed in 1997 – while ensuring the safety and security of the workers, the public, and the environment. Under the CWC, the United States has an obligation to destroy the chemical weapons stockpile by April 29, 2012.



US Army Photo

**Mission:** There are five mission areas within the Chemical Demilitarization Program:

1. Destroy chemical agents and weapons stockpile using incineration technology;
2. Destroy bulk container chemical agents stockpiles using neutralization technology;
3. Destroy chemical agents and weapons stockpiles using neutralization technologies;
4. Destroy Chemical Warfare Material (CWM) apart from the stockpile including: disposal of binary chemical weapons, former production facilities, and recovered chemical weapons; and
5. Chemical stockpile emergency preparedness.

**FY 2013 Program:** Continues closure activities at four CMA sites (Pine Bluff, AR; Tooele, UT; Anniston, AL; and Umatilla, OR). Funds on going construction efforts and continues systemization activities at the ACWA Program sites (Pueblo, CO and Blue Grass, KY) to accelerate completing destruction of the remaining 10 percent of the U.S. chemical weapons stockpile as close to 2017 as possible, in accordance with the National Defense Authorization Act for FY 2008.

**Prime Contractors:** URS Corporation, Arlington, VA; Bechtel National Incorporated, Pueblo, CO; Bechtel Parsons, Richmond, KY

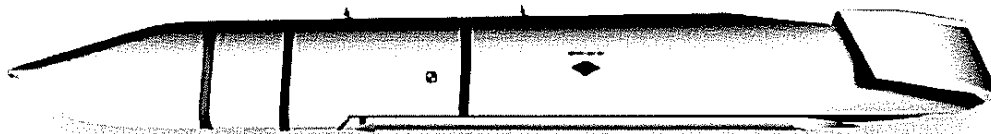
### Chemical Demilitarization

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
Chemical Agents and Munitions Destruction	1,467.3	-	1,554.4	-	1,301.8	-	-	-	1,301.8	-
MILCON	124.7	-	75.3	-	151.0	-	-	-	151.0	-
<b>Total</b>	<b>1,592.0</b>	<b>-</b>	<b>1,629.7</b>	<b>-</b>	<b>1,452.8</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,452.8</b>	<b>-</b>

*Numbers may not add due to rounding*

## FY 2013 Program Acquisition Costs by Weapon System

### Joint Air to Surface Standoff Missile **DOD - JOINT**



USAF Image

The Joint Air-to-Surface Standoff Missile (JASSM) is a joint Air Force and Navy program led by the Air Force to provide a conventional precision guided, long range standoff cruise missile that can be delivered from both fighters and bombers. The JASSM is procured in a baseline variant as well as an extended range (JASSM-ER) variant. Only the Air Force is currently buying this weapon.

**Mission:** The mission of the JASSM is to destroy targets from a long-range standoff position deliverable by fighter and bomber aircraft.

**FY 2013 Program:** Continues full rate production.

**Prime Contractor:** Lockheed Martin Corporation, Troy, AL

Joint Air to Surface Standoff Missile									
	FY 2011		FY 2012		FY 2013				
					Base Budget		OCO Budget		Total Request
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M Qty
RDT&E	19.3	-	5.8	-	8.0	-	-	-	8.0 -
Procurement	168.2	171	236.2	142	240.4	157	-	-	240.4 157
<b>Total</b>	<b>187.5</b>	<b>171</b>	<b>242.0</b>	<b>142</b>	<b>248.4</b>	<b>157</b>	<b>-</b>	<b>-</b>	<b>248.4 157</b>

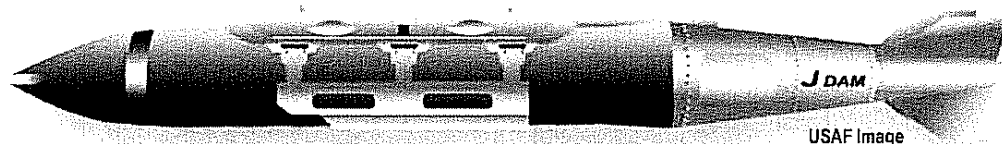
*Numbers may not add due to rounding*



## FY 2013 Program Acquisition Costs by Weapon System

### Joint Direct Attack Munition

**DoD - JOINT**



The Joint Direct Attack Munition (JDAM) is a joint Air Force and Navy program led by the Air Force. The JDAM improves the existing inventory of general purpose gravity bombs by integrating a Global Positioning System (GPS)/inertial navigation guidance capability that improves accuracy and adverse weather capability.

**Mission:** This program enhances DoD conventional strike system capabilities by providing the ability to precisely attack time-critical, high value fixed or maritime targets under adverse environmental conditions and from all altitudes.

**FY 2013 Program:** Continues production of the system at low rate, given acceptable inventory levels of JDAM.

**Prime Contractor:** The Boeing Company, St. Charles, MO

### Joint Direct Attack Munition

	FY 2011*		FY 2012*		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RDT&amp;E</b>	-	-	-	-	-	-	-	-	-	-
<b>Procurement</b>										
Air Force	346.4	13,061	127.2	4,259	101.9	3,259	53.9	1,419	155.8	4,678
<b>Total</b>	<b>346.4</b>	<b>13,061</b>	<b>127.2</b>	<b>4,259</b>	<b>101.9</b>	<b>3,259</b>	<b>53.9</b>	<b>1,419</b>	<b>155.8</b>	<b>4,678</b>

\*FY 2011 & FY 2012 include Base and OCO funding

Numbers may not add due to rounding

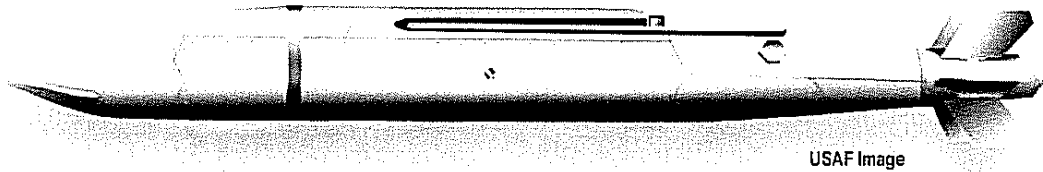
FY 2011 includes \$169.0 million in support of OCO.

FY 2012 includes \$50.6 million in support of OCO.

## FY 2013 Program Acquisition Costs by Weapon System

### Joint Standoff Weapon

**DOD - JOINT**



The Joint Standoff Weapon (JSOW - AGM-154) program is a joint Navy and Air Force program led by the Navy. The JSOW provides day, night, and adverse weather environment munition capability, and consists of three variants. The JSOW baseline (BLU-97) provides a day/night all-weather environment submunition for soft and area targets. The JSOW anti-armor variant (BLU-108) contains precision-guided anti-armor submunition warheads. The JSOW Unitary incorporates the dual-stage Broach penetrating warhead with terminal accuracy via Automatic Target Acquisition Seeker Technology.

**Mission:** The JSOW is a primary standoff precision guided munition. The day/night, adverse weather capability provides continuous munitions operations from a survivable standoff range. The Air Force stopped production of JSOW in FY 2005, favoring other weapons to meet the requirement.

**FY 2013 Program:** Continues production and product improvements of JSOW Unitary for the Navy only.

**Prime Contractor:** Raytheon Company, Tucson, AZ

### Joint Standoff Weapon

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	12.5	-	7.5	-	5.5	-	-	-	5.5	-
Procurement	128.9	225	131.7	246	127.6	280	-	-	127.6	280
Spares	0.3	-	0.2	-	0.2	-	-	-	0.2	-
<b>Total</b>	<b>141.7</b>	<b>225</b>	<b>139.4</b>	<b>246</b>	<b>133.3</b>	<b>280</b>	<b>-</b>	<b>-</b>	<b>133.3</b>	<b>280</b>

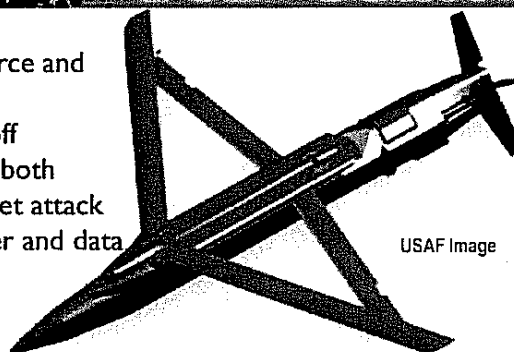
*Numbers may not add due to rounding*

## FY 2013 Program Acquisition Costs by Weapon System

### Small Diameter Bomb

**DOD - JOINT**

The Small Diameter Bomb (SDB) is a joint Air Force and Navy program led by the Air Force to provide a conventional small sized, precision guided, standoff air-to-ground weapon that can be delivered from both fighters and bombers. The SDB-I was a fixed-target attack weapon, whereas the SDB-II incorporates a seeker and data link which expands the use to moving targets.



**Mission:** The mission of the SDB is to destroy targets from a medium-range standoff position deliverable by both fighters and bombers, with higher loadout and less collateral damage compared to other weapons.

**FY 2013 Program:** Begins procurement of SDB II for use against moving and relocatable targets as well as fixed targets.

**Prime Contractor:** Raytheon Missile Systems, Tucson, AZ (SDB II)  
Boeing St. Charles, MO (SDB I)

### Small Diameter Bomb

	FY 2011		FY 2012*		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RDT&amp;E</b>										
Air Force	100.0	-	132.9	-	143.0	-	-	-	143.0	-
Navy	15.7	-	29.6	-	31.1	-	-	-	31.1	-
Subtotal	115.7	-	162.5	-	174.1	-	-	-	174.1	-
<b>Procurement</b>										
Air Force	119.2	2,785	19.8	100	42.0	144	-	-	42.0	144
Total	234.9	2,785	182.3	100	216.1	144.0	-	-	216.1	144

\*FY 2012 includes Base and OCO funding

Numbers may not add due to rounding

FY 2012 includes \$12.3 million in support of OCO.

## FY 2013 Program Acquisition Costs by Weapon System

### Javelin Advanced Anti-Tank Weapon

The Javelin Advanced Anti-tank Weapon System-Medium is a man-portable fire-and-forget weapon system used against tanks with conventional and reactive armor. Special features of Javelin are the choice of top attack or direct fire mode, integrated day/night sight, soft launch permitting fire from enclosures, and imaging infrared seeker.

**Mission:** To defeat armored targets with a man-portable weapon.

**FY 2013 Program:** Continues full rate production of missiles, Command Launch Units (CLU), and training devices.

**Prime Contractor:** Raytheon/Lockheed Martin Javelin Joint Venture, Tucson, AZ and Orlando, FL



### Javelin Advanced Anti-Tank Weapon

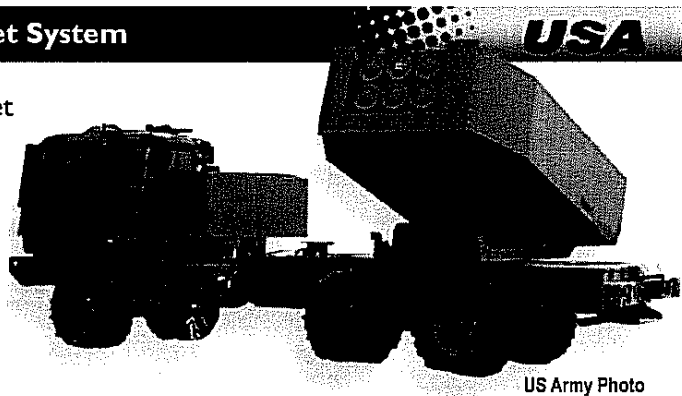
	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	-	-	9.9	-	5.0	-	-	-	5.0	-
Procurement	163.0	715	160.8	710	81.1	400	-	-	81.1	400
<b>Total</b>	<b>163.0</b>	<b>715</b>	<b>170.7</b>	<b>710</b>	<b>86.1</b>	<b>400</b>	<b>-</b>	<b>-</b>	<b>86.1</b>	<b>400</b>

*Numbers may not add due to rounding*

## FY 2013 Program Acquisition Costs by Weapon System

### Guided Multiple Launch Rocket System

The Guided Multiple Launch Rocket System (GMLRS) consists of a C-130 transportable, wheeled, indirect fire, rocket/missile system capable of firing all rockets and missiles in the current and future Multiple Launch Rocket System (MLRS) family of munitions.



US Army Photo

**Mission:** The mission of GMLRS is to neutralize or suppress enemy field artillery and air defense systems and supplement cannon artillery fires.

**FY 2013 Program:** Continues full rate production as well as product improvements such as insensitive munition and alternative warhead development.

**Prime Contractor:** Lockheed Martin Corporation, Dallas, TX

### Guided Multiple Launch Rocket System

	FY 2011		FY 2012*		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RDT&amp;E</b>	19.0	-	66.6	-	143.0	-	-	-	143.0	-
<b>Procurement</b>	264.5	2,592	333.2	3,204	218.7	1,608	20.5	186	239.2	1,794
<b>Total</b>	<b>283.5</b>	<b>2,592</b>	<b>399.8</b>	<b>3,204</b>	<b>361.7</b>	<b>1,608</b>	<b>20.5</b>	<b>186</b>	<b>382.2</b>	<b>1,794</b>

\*FY 2012 includes Base and OCO funding

Numbers may not add due to rounding

FY 2012 includes \$19.0 million funded in OCO.

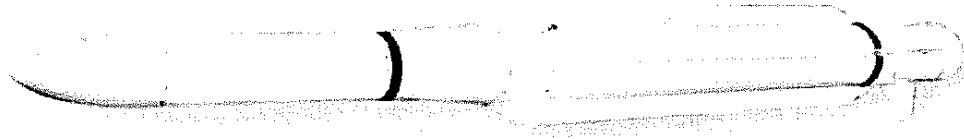
Procurement represents Army only; Marine Corps procures rockets but not as a separate line item.

## FY 2013 Program Acquisition Costs by Weapon System

### Evolved Seasparrow Missile



NSPO Photo



The Evolved Seasparrow Missile (ESSM) is an improved version of the NATO Seasparrow missile, designed for ship self-defense.

**Mission:** The mission of the ESSM is to provide to the Navy a missile with performance to defeat current and projected threats that possess low altitude, high velocity, and maneuver characteristics beyond the engagement capabilities of other ship self-defense systems.

**FY 2013 Program:** Continues full rate production.

**Prime Contractor:** Raytheon Company, Tucson, AZ

### Evolved Seasparrow Missile

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	-	-	-	-	-	-	-	-	-	-
Procurement	45.3	33	48.5	35	58.2	37	-	-	58.2	37
<b>Total</b>	<b>45.3</b>	<b>33</b>	<b>48.5</b>	<b>35</b>	<b>58.2</b>	<b>37</b>	<b>-</b>	<b>-</b>	<b>58.2</b>	<b>37</b>

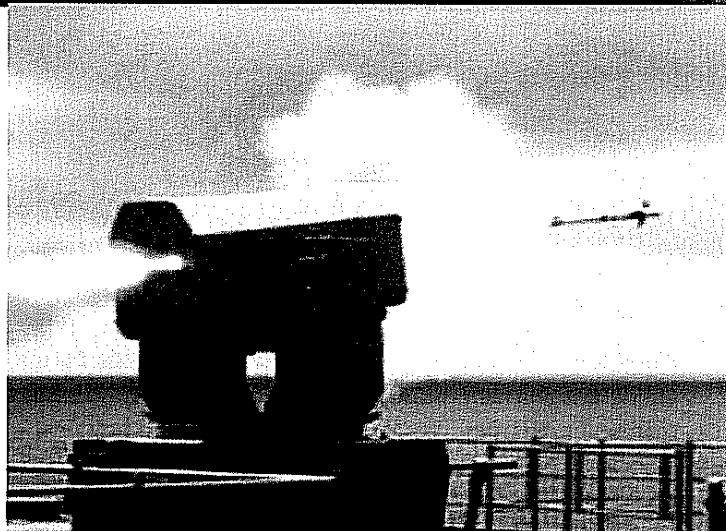
*Numbers may not add due to rounding*

## FY 2013 Program Acquisition Costs by Weapon System

### Rolling Airframe Missile

The Rolling Airframe Missile (RAM) is a high firepower, Lightweight complementary self-defense system to engage anti-ship cruise missiles.

**Mission:** The mission of the RAM is to provide high firepower close-in defense of combatant and auxiliary ships by utilizing a dual mode, passive radio frequency/infrared missile in a compact 21 missile launcher.



**FY 2013 Program:** Continues production of missiles and alterations

**Prime Contractor:** Raytheon Company, Tucson, AZ

### Rolling Airframe Missile

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RDT&amp;E</b>	-	-	-	-	-	-	-	-	-	-
<b>Procurement</b>	99.6	90	66.2	61	66.8	62	-	-	66.8	62
<b>Total</b>	99.6	90	66.2	61	66.8	62	-	-	66.8	62

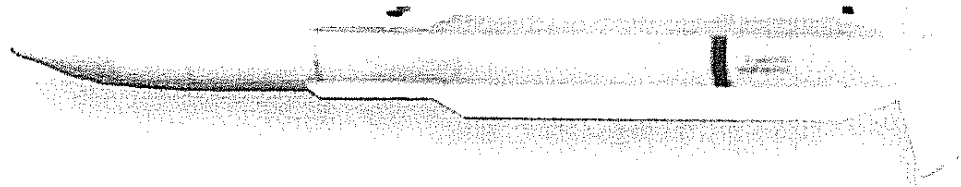
*Numbers may not add due to rounding*

## FY 2013 Program Acquisition Costs by Weapon System

### Standard Family of Missiles



US Navy Photo



The STANDARD missile family consists of various air defense missiles including supersonic, medium, and extended range; surface-to-air; and surface-to-surface missiles. The Standard Missile-6 is a surface Navy Anti-Air Warfare (AAW) missile that provides area and ship self defense. The missile is intended to project power and contribute to raid annihilation by destroying manned fixed and rotary wing aircraft, Unmanned Aerial Vehicles (UAV), Land Attack Cruise Missiles (LACM), and Anti-Ship Cruise Missiles (ASCM) in flight. It was designed to fulfill the need for a vertically launched, extended range missile compatible with the Aegis Weapon System (AWS) to be used against extended range threats at-sea, near land, and overland. SM-6 combines the tested legacy of STANDARD Missile-2 (SM-2) propulsion and ordnance with an active Radio Frequency (RF) seeker modified from the AIM-120 Advanced Medium Range Air-to-Air Missile (AMRAAM), allowing for over-the-horizon engagements, enhanced capability at extended ranges and increased firepower.

**Mission:** The mission of the STANDARD missile family is to provide all-weather, anti-aircraft and surface-to-surface armament for cruisers, destroyers, and guided missile frigates. The most recent variant of Standard Missile is SM-6, which incorporates an AMRAAM seeker for increased performance, including overland capability.

**FY 2013 Program:** Continues production of the SM-6 variant.

**Prime Contractor:** Raytheon Company, Tucson, AZ

### Standard Family of Missiles

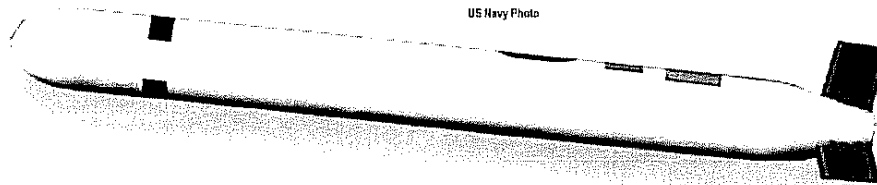
	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	93.4	-	46.7	-	63.9	-	-	-	63.9	-
Procurement	246.7	67	356.9	89	399.5	94	-	-	399.5	94
<b>Total</b>	<b>340.1</b>	<b>67</b>	<b>403.6</b>	<b>89</b>	<b>463.4</b>	<b>94</b>	<b>-</b>	<b>-</b>	<b>463.4</b>	<b>94</b>

Numbers may not add due to rounding



## FY 2013 Program Acquisition Costs by Weapon System

### Tactical Tomahawk Cruise Missile



The Tactical Tomahawk is a Navy cruise missile weapon system with a long-range conventional warhead system, which is sized to fit torpedo tubes and capable of being deployed from a variety of surface ship and submarine platforms. The Tactical Tomahawk, also referred to as Block IV, incorporates an active electronically scanned array, millimeter-wave seeker, which provides target acquisition and homing; and a passive electronic surveillance system is for long-range acquisition and identification. The missile carries a 1,000-lb. warhead, and is normally launched from a SSNs equipped with the vertical launch systems. The Block IV missiles also provides new capability enhancements, to include increased flexibility utilizing two-way satellite communications to reprogram the missile in-flight, and increased responsiveness with faster launch timelines.

**Mission:** The mission of the TOMAHAWK is to provide a long-range cruise missile launched from a variety of platforms against land and sea targets.

**FY 2013 Program:** Continues production at a minimum sustaining rate.

**Prime Contractor:** Raytheon Company, Tucson, AZ

### Tactical Tomahawk Cruise Missile

	FY 2011*		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RDT&amp;E</b>	10.4	-	8.8	-	11.3	-	-	-	11.3	-
<b>Procurement</b>	596.7	417	297.6	196	309.0	196	-	-	309.0	196
<b>Total</b>	<b>607.1</b>	<b>417</b>	<b>306.4</b>	<b>196</b>	<b>320.3</b>	<b>196</b>	<b>-</b>	<b>-</b>	<b>320.3</b>	<b>196</b>

\* FY 2011 includes Base and OCO funding

Numbers may not add due to rounding

FY 2011 includes \$310.0 million in support of OCO

## FY 2013 Program Acquisition Costs by Weapon System

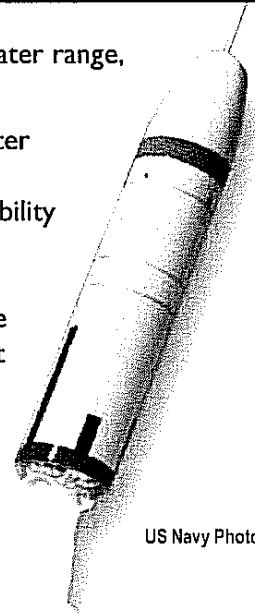
### Trident II Ballistic Missile Modifications

The Trident II (D5) is a submarine launched ballistic missile with greater range, payload capability, and accuracy than the Trident I (C4) missile.

**Mission:** The mission of the Trident II (D5) ballistic missile is to deter nuclear war by means of assured retaliation in response to a major attack on the United States or its Allies, and to enhance nuclear stability by deterring an enemy first strike. The Trident II (D5) missile has the ability to precisely attack time-critical, high value, fixed targets. The importance of this program as a key component to the sea-based leg of the nuclear triad was re-confirmed by the President and Congress by ratification of the New START Treaty.

**FY 2013 Program:** Funds the continuing D5 Missile Life Extension Program replacing missile rocket motors, guidance systems, other critical electronic components, arming, fuzing and firing systems, and production support (including flight test instrumentation and additional re-entry system hardware).

**Prime Contractor:** Lockheed Martin Corporation, Sunnyvale, CA



US Navy Photo

### Trident II Ballistic Missile

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	63.8	-	84.3	-	101.3	-	-	-	101.3	-
Procurement	1,258.6	24	1,493.9	24	1,405.7	-	-	-	1,405.7	-
Spares	6.1	-	5.3	-	5.6	-	-	-	5.6	-
<b>Total</b>	<b>1,328.5</b>	<b>24</b>	<b>1,583.5</b>	<b>24</b>	<b>1,512.6</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,512.6</b>	<b>-</b>

*Numbers may not add due to rounding*



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## Shipbuilding and Maritime Systems

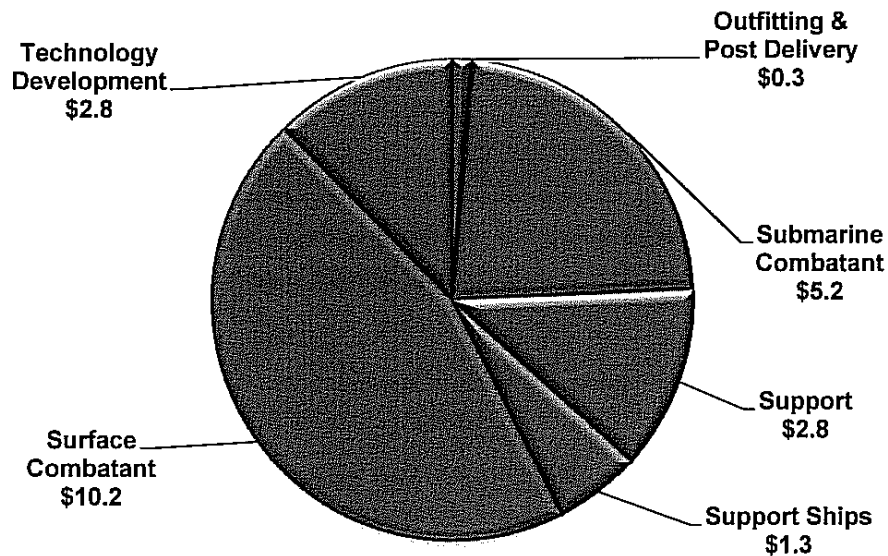
A central principle to the U.S. Maritime Strategy is forward presence. Forward presence promotes conflict deterrence by ensuring forces are in a position to expeditiously respond to conflict. Therefore, sea services must buy, build, and maintain maritime systems in accordance with mission need.

The Shipbuilding Portfolio for FY 2013 includes the funding for 10 new ships (2 Virginia Class nuclear attack submarines; 2 DDG-51 Flight IIA destroyers; 4 Littoral Combat Ship (LCS); 1 Joint High Speed Vessel (JHSV); along with the construction funding for 1 carrier, the USS *John F. Kennedy*, the second FORD class nuclear powered aircraft carrier.) These procurements will allow the U.S. Navy to maintain maritime superiority well into the 21st century. The following highlights the FY 2013 Shipbuilding Portfolio budget request:

### FY 2013 Shipbuilding and Maritime Systems – Base: \$22.6 Billion

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(\$ in billions)



Source: FY 2013 PRCP – Investment Categorization

Support ship subcategory includes funding in the National Defense Sealift Fund (NDSF)

Numbers may not add due to rounding

## FY 2013 Program Acquisition Costs by Weapon System

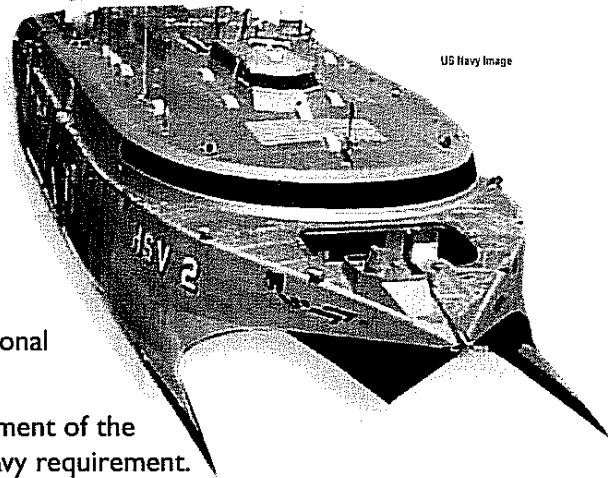
### Joint High Speed Vessel

The Joint High Speed Vessel (JHSV) is a Navy effort for a high speed shallow draft vessel designed for rapid intra-theater transport.

**Mission:** The JHSVs provide combatant commanders with high-speed, intra-theater sealift mobility, inherent cargo handling capacity, and the agility to achieve positional advantage over operational distances.

**FY 2013 Program:** Funds the procurement of the tenth and final JHSV to meet the total Navy requirement.

**Prime Contractor:** Austal USA, Mobile, AL



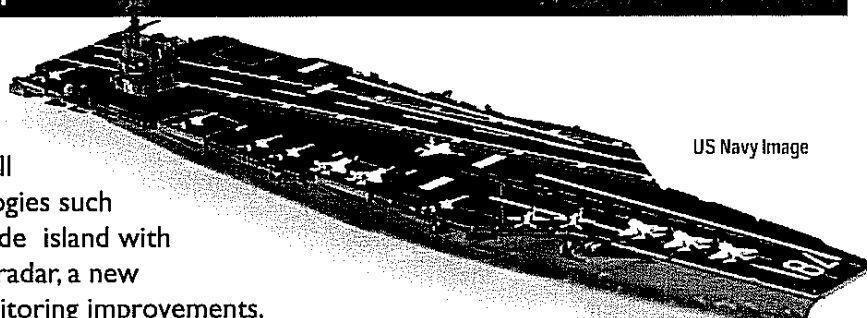
Joint High Speed Vessel									
	FY 2011		FY 2012		FY 2013				
					Base Budget		OCO Budget		Total Request
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M Qty
<b>RDT&amp;E</b>									
Navy	3.5	-	4.1	-	1.9	-	-	-	1.9 -
Army	3.0	-	-	-	-	-	-	-	- -
<b>Subtotal</b>	<b>6.5</b>	<b>-</b>	<b>4.1</b>	<b>-</b>	<b>1.9</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.9 -</b>
<b>Procurement</b>									
Navy	179.7	1	372.3	2	189.2	1	-	-	189.2 1
Army	203.9	1	-	-	-	-	-	-	- -
<b>Subtotal</b>	<b>383.6</b>	<b>2</b>	<b>372.3</b>	<b>2</b>	<b>189.2</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>189.2 1</b>
<b>Total</b>	<b>390.1</b>	<b>2</b>	<b>376.4</b>	<b>2</b>	<b>191.1</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>191.1 1</b>

*Numbers may not add due to rounding*

## FY 2013 Program Acquisition Costs by Weapon System

### CVN 21 Carrier Replacement

Currently, there are 11 active carriers in the Navy's fleet. The CVN 21 ships will include new technologies such as an integrated topside island with a new multi-function radar, a new propulsion plant, monitoring improvements, manpower reduction technologies, flight deck enhancements, Electromagnetic Aircraft Launching System (EMALS), and advanced arresting gear.



US Navy Image

**Mission:** The CVN 21 Carrier Replacement ships provide credible, sustainable, independent forward presence during peacetime without access to land bases; operate as the cornerstone of a joint and/or allied maritime expeditionary force in response to crisis; and carry the war to the enemy through joint multi-mission offensive operations.

**FY 2013 Program:** Funds first year of construction funding for USS *John F. Kennedy* (CVN 79).

**Prime Contractor:** Huntington Ingalls Incorporated, Newport News, VA

### CVN 21 Carrier Replacement

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	464.3	-	136.9	-	173.5	-	-	-	173.5	-
Procurement	2,615.7	-	554.7	-	608.2	1	-	-	608.2	1
Total	3,080.0	-	691.6	-	781.7	1	-	-	781.7	1

Numbers may not add due to rounding

## FY 2013 Program Acquisition Costs by Weapon System

### DDG 51 AEGIS Destroyer

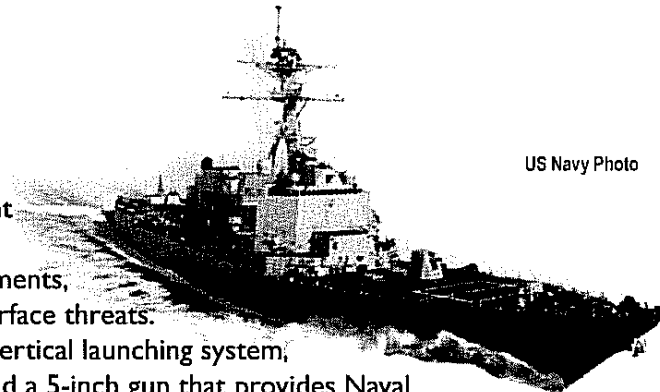
The DDG 51 AEGIS Destroyer Class ships operate defensively and offensively as units of Carrier Strike Groups and Surface Action Groups, in support of Underway Replenishment Groups and the Marine Amphibious Task Forces in multi-threat environments, which include air, surface, and subsurface threats.

The DDG 51 ship is armed with a vertical launching system, which accommodates 96 missiles and a 5-inch gun that provides Naval Surface Fire Support to forces ashore and anti-ship gunnery capability.

**Mission:** The DDG 51 AEGIS Destroyer ship provides air and maritime dominance and land attack capability with its Aegis Anti-Submarine and Tomahawk Weapon Systems. The DDG 51 Flight also is the first new class of destroyers that is delivered with a ballistic missile defense capability.

**FY 2013 Program:** Funds two DDG 51 AEGIS Destroyers as part of a multiyear procurement for 9 ships from FY 2013-FY 2017.

**Prime Contractors:** General Dynamics Corporation, Bath, ME  
Huntington Ingalls Incorporated, Pascagoula, MS



US Navy Photo

### DDG 51 AEGIS Destroyer

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
<b>RDT&amp;E</b>	-	-	-	-	-	-	-	-	-	-
<b>Procurement</b>	2,900.3	2	2,081.4	1	3,514.9	2			3,514.9	2
<b>Total</b>	<b>2,900.3</b>	<b>2</b>	<b>2,081.4</b>	<b>1</b>	<b>3,514.9</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>3,514.9</b>	<b>2</b>

*Numbers may not add due to rounding*

## FY 2013 Program Acquisition Costs by Weapon System

### Littoral Combat Ship



The Littoral Combat Ship (LCS) is a fast, agile, and stealthy surface combatant capable of anti-access missions against asymmetric threats in the littorals. It will be the first Navy ship to separate capability from hull form. For example, LCS will be capable of employing interchangeable mission modules for Mine Warfare, Anti-Submarine Warfare, and Anti-Surface Warfare to counter anti-access threats close to shore such as mines, quiet diesel submarines, and swarming small boats.

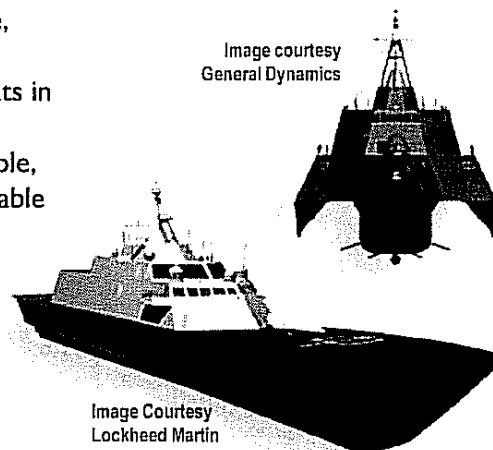
The LCS mission modules will be exchanged as operational conditions warrant.

The LCS seaframe acquisition strategy procures two seaframe designs. The LCS seaframe and mission modules are two separate and distinct acquisition programs that are synchronized to ensure combined capability.

**Mission:** The LCS defeats asymmetric threats, and assures naval and joint forces access into contested littoral regions by prosecuting small boats, mines countermeasures, and littoral anti-submarine warfare.

**FY 2013 Program:** Funds four LCS seaframes at \$1.8 billion and procurement of three mission modules (1 Mine Countermeasures and 2 Surface Warfare).

**Prime Contractors:** Lockheed Martin, Marinette, WI and Austal USA, Mobile, AL



### Littoral Combat Ship

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	191.6	-	292.7	-	429.4	-	-	-	429.4	-
Procurement*	1,282.6	2	1,818.5	4	1,816.2	4	-	-	1,816.2	4
<b>Total</b>	<b>1,474.2</b>	<b>2</b>	<b>2,111.2</b>	<b>4</b>	<b>2,245.6</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>2,245.6</b>	<b>4</b>

*Numbers may not add due to rounding*

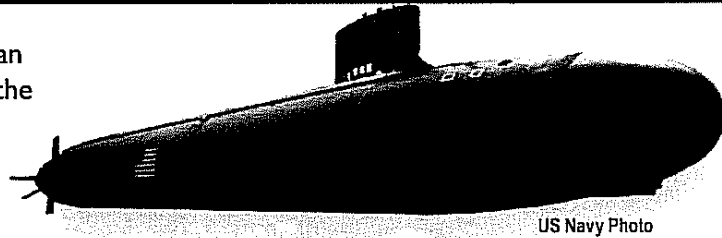
\*Includes other procurement for mission modules



## FY 2013 Program Acquisition Costs by Weapon System

### SSN 774 Virginia Class Submarine

The Virginia Class Submarine is an attack submarine that provides the Navy with the capabilities to maintain undersea supremacy in the 21st century. The Virginia Class Submarine is nuclear-powered and is replacing



US Navy Photo

the fleet of 688 class submarines. It is characterized by state-of-the-art stealth and enhanced features for Special Operations Forces. The Virginia Class Submarines are able to attack targets ashore with Tomahawk cruise missiles and to conduct covert long-term surveillance of land areas, littoral waters, and other sea-based forces.

**Mission:** The Virginia Class Submarines seek and destroy enemy ships across a wide spectrum of scenarios, working independently and in consort with a battle group and other ships, providing joint commanders with early, accurate knowledge of the battlefield.

**FY 2013 Program:** Funds two ships at \$3.2 billion as part of an existing multiyear procurement contract and advance procurement of \$0.9 billion for one ship in FY 2014 and two ships in FY 2015.

**Prime Contractors:** General Dynamics Corporation, Groton, CT  
Huntington Ingalls Incorporated, Newport News, VA

### SSN 774 Virginia Class Submarine

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	166.9	-	112.2	-	165.2	-	-	-	165.2	-
Procurement	5,093.3	2	4,682.7	2	4,092.5	2	-	-	4,092.5	2
<b>Total</b>	<b>5,260.2</b>	<b>2</b>	<b>4,794.9</b>	<b>2</b>	<b>4,257.7</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>4,257.7</b>	<b>2</b>

*Numbers may not add due to rounding*

## FY 2013 Program Acquisition Costs by Weapon System

### CVN Refueling Complex Overhaul

The CVN Refueling Complex Overhaul (RCOH) life extension program provides for the modernization of nuclear powered fleet aircraft carriers. In the RCOH program, the nuclear fuel is replaced, and major system modernization activities are implemented to extend the useful operational life of the ship.

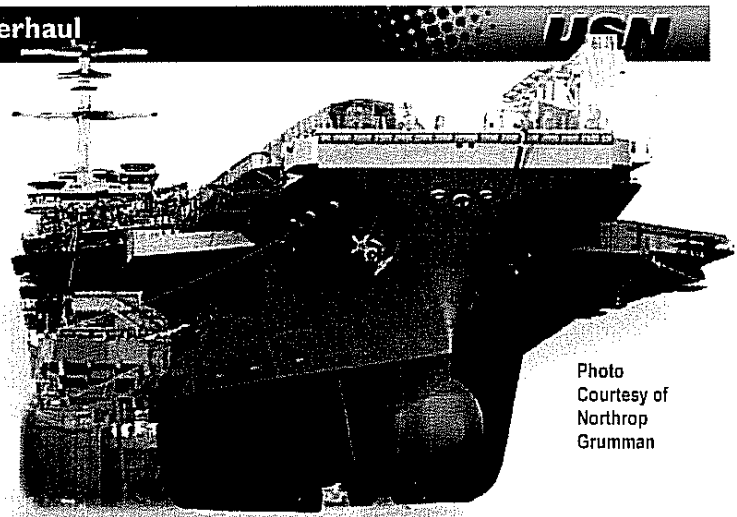


Photo  
Courtesy of  
Northrop  
Grumman

**Mission:** The RCOH program refuels and upgrades the Nimitz class aircraft carriers at mid-life to ensure reliable operations during the remaining ship life that uses a traditional maintenance cycle.

**FY 2013 Program:** Funds the Refueling and Complex Overhaul of USS *Abraham Lincoln* (CVN 72).

**Prime Contractor:** Huntington Ingalls Incorporated, Newport News, VA

### CVN Refueling Complex Overhaul

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	-	-	-	-	-	-	-	-	-	-
Procurement	405.7	-	515.6	-	1,613.3	1	-	-	1,613.3	1
<b>Total</b>	<b>405.7</b>	<b>-</b>	<b>515.6</b>	<b>-</b>	<b>1,613.3</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>1,613.3</b>	<b>1</b>

Numbers may not add due to rounding



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## **Space Based and Related Systems**

Space assets support deployed United States forces by providing communications services, navigation capabilities, and information collected by remote sensors such as weather satellites and intelligence collection systems. Space forces contribute to the overall effectiveness of U.S. military forces by acting as a force multiplier that enhances combat power. The capability to control space contributes to achieving information superiority and battle space dominance.

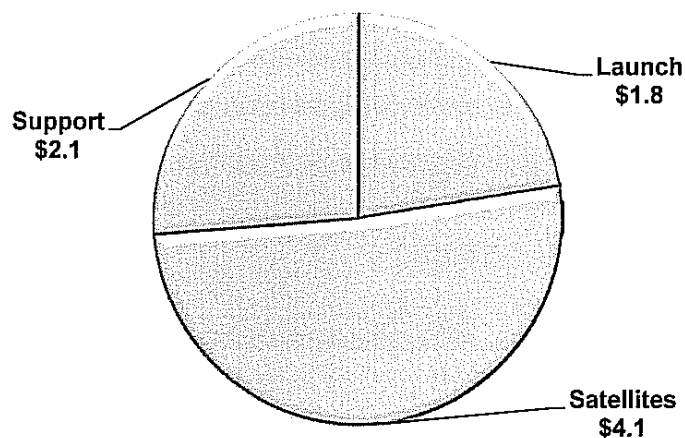
Procurement of satellites and launch services are typically funded two years prior to launch. Generally speaking, the first two satellites of a new system are purchased with Research, Development, Test & Evaluation funding and the remainder of the satellites are purchased with procurement funding. The Air Force is implementing approaches to maximize efficient satellite acquisitions. These approaches include buying blocks of satellites, using fixed-price contracting to stabilize requirements, promoting a stable research and development investment for evolutionary growth, and modifying the annual funding approach for industrial base efficiency.

The FY 2013 overall space program request at \$8.0 billion is lower than FY 2012 (-22%), due to fewer satellites and launch vehicles being procured, and various research & development programs being rescope or terminated, including the Defense Weather Satellite System.

### **FY 2013 Space Based and Related Systems – Base and OCO: \$8.0 Billion**

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*(S in billions)*



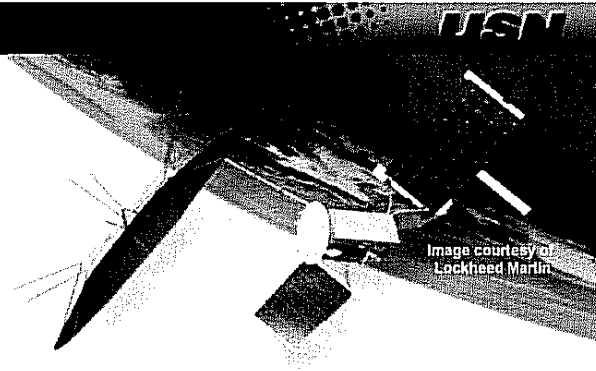
Source: FY 2013 PRCP – Investment Categorization

Numbers may not add due to rounding

## FY 2013 Program Acquisition Costs by Weapon System

### Mobile User Objective System

The Mobile User Objective System (MUOS) is the next generation DoD advanced narrow band Ultra High Frequency (UHF) communications satellite constellation. It consists of four satellites in geosynchronous orbit with one on-orbit spare and a fiber optic terrestrial network connecting four ground stations. The MUOS satellite includes the new networked payload and a separate legacy payload. The MUOS will replace the existing UHF Follow-On (UFO) constellation and provide a much higher data rate capability for mobile users.



- There will be 16 beams per satellite with data rates of 64 kbps "on the move"
- The DoD Teleport will be the portal to the Defense Information System Network (DSN, SIPRNET and NIPRNET)
- The projected on-orbit capability for the MUOS is May 2012

**Mission:** The MUOS will provide the mobile warfighter with point-to-point and netted communications services with a secure, "communications-on-the-move" capability on a 24 hours a day, 7 days a week basis.

**FY 2013 Program:** Funds on-orbit testing for satellite #1; remaining testing and preparation efforts to support launch of satellite #2; software installation, test, and certification of hardware/software at the site in Sicily; and acceptance testing of the MUOS follow-on waveform.

**Prime Contractor:** Lockheed Martin Corporation, Sunnyvale, CA

### Mobile User Objective System

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	391.4	-	243.9	-	145.9	-	-	-	145.9	-
Procurement	503.1	1	238.2	-	21.5	-	-	-	21.5	-
<b>Total</b>	<b>894.5</b>	<b>1</b>	<b>482.1</b>	<b>-</b>	<b>167.4</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>167.4</b>	<b>-</b>

*Numbers may not add due to rounding*

## FY 2013 Program Acquisition Costs by Weapon System

### Advanced Extremely High Frequency

The Advanced Extremely High Frequency (AEHF) satellite will be a constellation of communications satellites in geosynchronous orbit that will replenish the existing EHF system MILSTAR satellite at a much higher capacity and data rate capability.

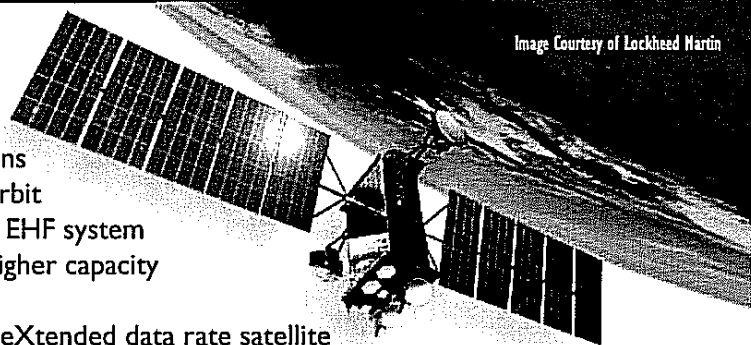
- 24-hour low, medium, and eXtended data rate satellite connectivity from 65 N to 65 S latitude worldwide
- 8 full time spot beam antennas @ 75 bps to 8.192 Mbps data rate
- 24 time shared spot beam coverages @ 75 bps to 2.048 Mbps data rate
- 2 crosslink antennas per satellite (60 Mbps)
- Up to 160 simultaneous agile beam coverages (75 bps to 8.192 Mbps)

The AEHF is a collaborative program that also includes resources for Canada, the United Kingdom, and the Netherlands.

**Mission:** The AEHF constellation will provide survivable, anti-jam, worldwide secure communications for strategic and tactical users.

**FY 2013 Program:** Continues procurement of the block buy of space vehicles #5 and #6 under the Efficient Space Procurement (ESP) acquisition approach (formerly, the Evolutionary Acquisition for Space Efficiency (EASE)). Continues the Space Modernization Initiative (SMI) for future space vehicles.

**Prime Contractor:** Lockheed Martin Corporation, Sunnyvale, CA



### Advanced Extremely High Frequency

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	385.0	-	397.4	-	229.2	-	-	-	229.2	-
Procurement	256.9	-	551.5	2	557.2	-	-	-	557.2	-
Total	641.9	-	948.9	2	786.4	-	-	-	786.4	-

Numbers may not add due to rounding

## Evolved Expendable Launch Vehicle

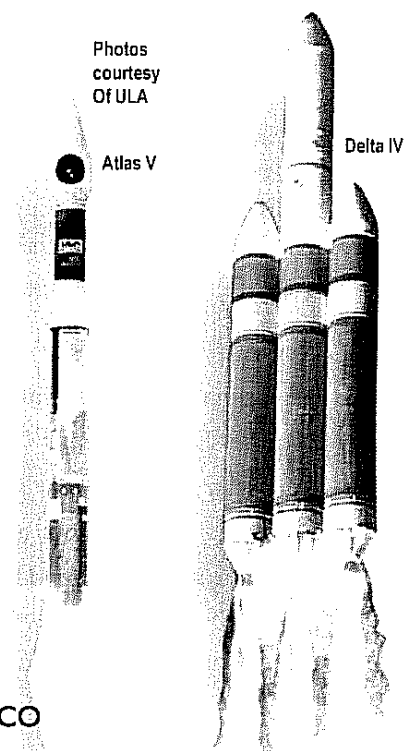


The Evolved Expendable Launch Vehicle (EELV) replaced the heritage Delta, Atlas, and Titan launch vehicle families. The EELV provides the DoD, the National Reconnaissance Office (NRO), and other government and commercial purchasers launch services for medium to heavy lift class satellites. As of December 2006, the United Launch Alliance joint venture is the sole provider of EELV launch services.

**Mission:** The EELV program provides launch vehicles and services for medium and heavy class satellites.

**FY 2013 Program:** Funds the procurement of four launch vehicles and associated launch services and support activities. The figures below do not include EELVs for the Navy or NRO. Those launch vehicles are funded in the specific satellite program budgets.

**Prime Contractor:** United Launch Alliance, Centennial, CO



## Evolved Expendable Launch Vehicle

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	53.8	-	14.5	-	8.0	-	-	-	8.0	-
Procurement	1,144.5	3	1,701.7	4	1,679.9	4	-	-	1,679.9	4
Total	1,198.3	3	1,716.2	4	1,687.9	4	-	-	1,687.9	4

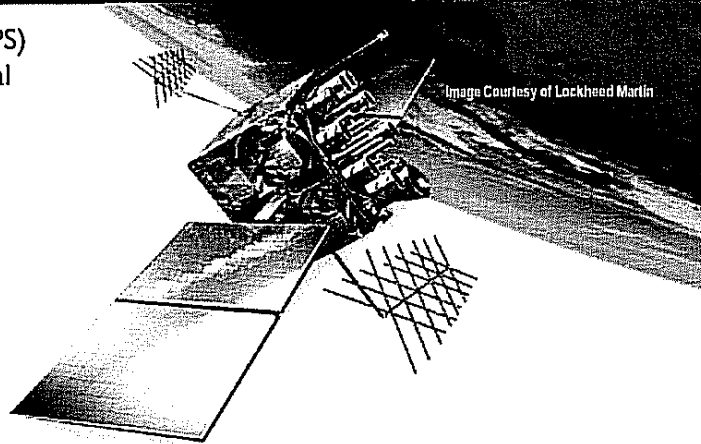
Numbers may not add due to rounding

## FY 2013 Program Acquisition Costs by Weapon System

### Global Positioning System

The Global Positioning System (GPS) provides a global, three-dimensional positioning, navigation, and timing information system for aircraft, artillery, ships, tanks and other weapons delivery systems. The fully operational GPS constellation consists of at least 24 satellites on-orbit at all times.

The GPS III space vehicles will deliver significant enhancements, including a new LIC (civil) Galileo-compatible signal, enhanced M-code earth coverage power, and a growth path to full warfighter capabilities. The first GPS III satellite will be available for launch in 2014.



**Mission:** The GPS constellation provides worldwide positioning, navigation, and precise time to military and civilian users.

**FY 2013 Program:** Funds the procurement of two GPS III satellites. Continues to sustain the GPS constellation with the assembly and launch of replenishment satellites. Continues the development of the next generation GPS ground control system.

**Prime Contractors:** GPS III: Lockheed Martin Corporation, Newtown, PA  
GPS OCX Phase A: Raytheon Company, Aurora, CO

### Global Positioning System

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	817.2	-	835.6	-	704.9	-	-	-	704.9	-
Procurement	71.8	-	629.3	2	558.8	2	-	-	558.8	2
<b>Total</b>	<b>889.0</b>	<b>-</b>	<b>1,464.9</b>	<b>2</b>	<b>1,263.7</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>1,263.7</b>	<b>2</b>

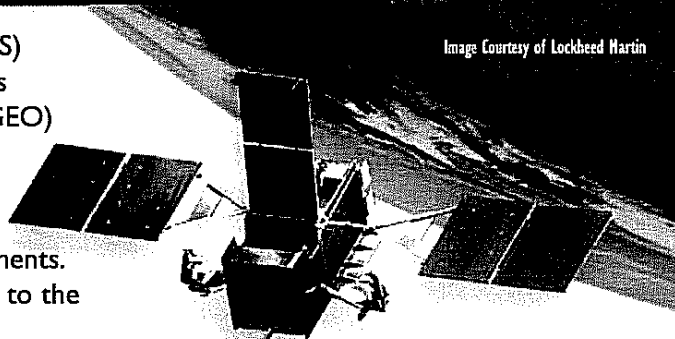
*Numbers may not add due to rounding*



## FY 2013 Program Acquisition Costs by Weapon System

### Space Based Infrared System

Space Based Infrared System (SBIRS) will field a constellation of satellites in Geosynchronous Earth Orbit (GEO) and hosted payloads in Highly Elliptical Orbit (HEO) with an integrated centralized ground station serving all SBIRS space elements. The SBIRS is the follow-on system to the Defense Support Program (DSP).



The infrared (IR) payload consists of:

- Scanning IR sensor providing two times the revisit rate and three times the sensitivity of DSP
- Staring IR sensor providing a higher fidelity and persistent coverage for areas of interest

The first HEO payload was operational in December 2008. The first GEO satellite was launched in May 2011.

**Mission:** The SBIRS provides initial warning of ballistic missile launches.

**FY 2013 Program:** Initiates the procurement of the block buy of space vehicles #5 and #6 under the Efficient Space Procurement (ESP) acquisition approach (formerly, the Evolutionary Acquisition for Space Efficiency (EASE)). Continues the Space Modernization Initiative (SMI) for future space vehicles.

**Prime Contractor:** Lockheed Martin Corporation, Sunnyvale, CA

### Space Based Infrared System

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	523.8	-	621.6	-	448.6	-	-	-	448.6	-
Procurement	963.6	1	374.5	-	501.4	2	-	-	501.4	2
Total	1,487.4	1	996.1	-	950.0	2	-	-	950.0	2

*Numbers may not add due to rounding*

## FY 2013 Program Acquisition Costs by Weapon System

### Wideband Global Satellite

The Wideband Global Satellite (WGS) system is a constellation of satellites in geosynchronous orbit providing worldwide communication coverage for tactical and fixed users. Dual-frequency WGS satellites augment, then replace the Defense Satellite Communications System (DSCS) X-band frequency service and augments the one-way Global Broadcast Service (GBS) Ka-band frequency capabilities. Additionally, the WGS provides a new high capacity two-way Ka-band frequency service. Each satellite features the following capabilities:

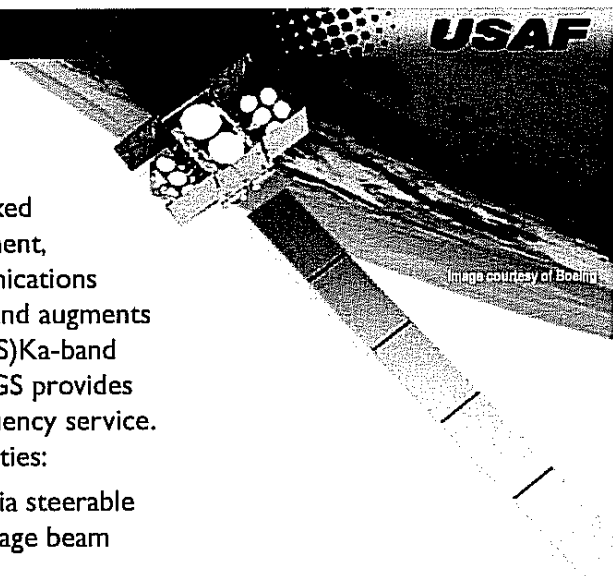
- X-band: 8 spot-beam transmit/receive via steerable phased-array antennas; one Earth coverage beam
- Ka-band: 10 gimbaled dish antennas
- 35 x 125 MHz channels
- 2.1 Gbps capacity

The WGS system currently consists of ten satellites, eight U.S. funded, and two funded via international partnerships. The fourth WGS satellite launched on January 20, 2012.

**Mission:** The WGS constellation provides high-capacity communications capabilities to support national objectives and to enable joint and coalition operations.

**FY 2013 Program:** Funds the checkout, launch and support costs of the WGS constellation.

**Prime Contractor:** The Boeing Company, El Segundo, CA



### Wideband Global Satellite

	FY 2011		FY 2012		FY 2013					
					Base Budget		OCO Budget		Total Request	
	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty
RDT&E	60.2	-	-	-	-	-	-	-	-	-
Procurement	559.3	1	792.9	2	36.8	-	-	-	36.8	-
Total	619.5	1	792.9	2	36.8	-	-	-	36.8	-

*Numbers may not add due to rounding*



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